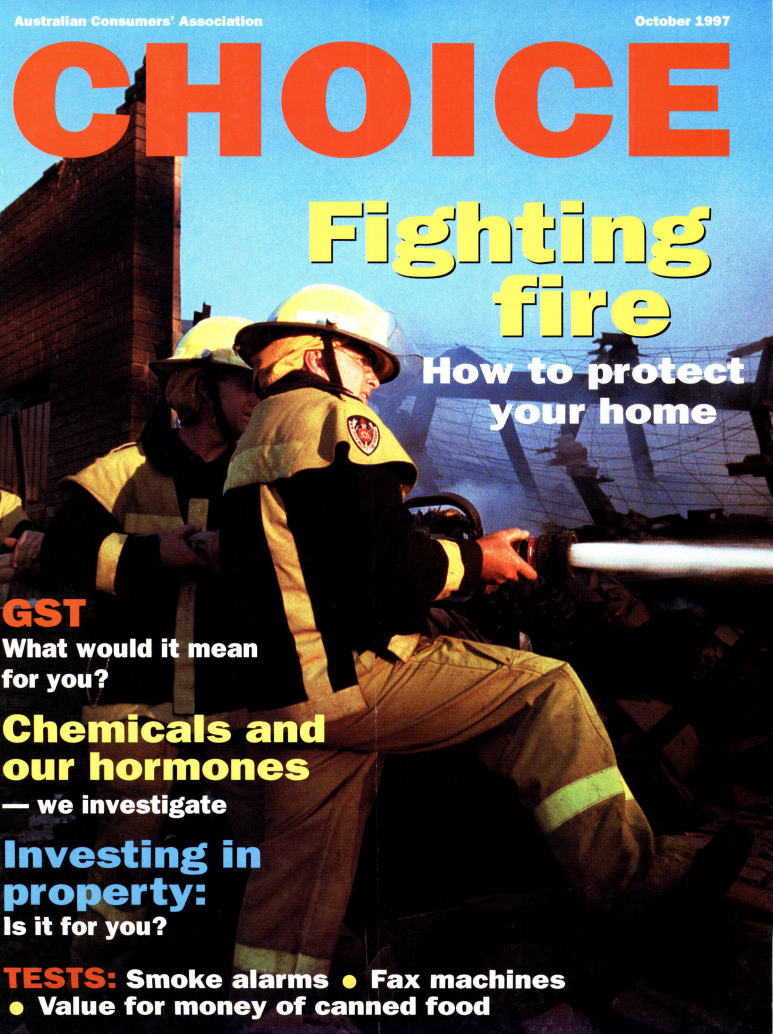
Australian Consumers' Association October 1997

CHOICE



Fighting fire

How to protect your home

GST
What would it mean for you?

Chemicals and our hormones
— we investigate

Investing in property:
Is it for you?

TESTS: Smoke alarms • Fax machines • Value for money of canned food

A small world

Jane Mackenzie

The Australian Consumers' Association isn't alone in the world. We're part of a global movement called Consumers International, which has member organisations from all over the world in both developing and developed countries.

Consumers International has many roles, one of which is to promote the interests of consumers in parts of the world where their rights take a low second place to the interests of big business.

Many of CI's member organisations also publish magazines like CHOICE, with comparative tests of products and services. Where you can buy the same products in several different countries — in particular in the European Union, for example — these organisations often get together for their testing, which saves all of them money.

At CHOICE we work in the same way with the New Zealand organisation's magazine, *Consumer*. CHOICE's labs test many common products (such as fridges, washing machines, VCRs, televisions, audio equipment, clothes dryers, power tools and more) for both countries, and both of us save money by co-operating in this way.

The magazines worldwide co-operate in other ways too. For example, *Oils ain't oils?*, on page 30 of this issue, is a report on a massive test of motor oils conducted by our US counterpart, *Consumer Reports*.

This test was bigger than anything CHOICE could have afforded to undertake, involving a fleet of 75 New York City taxis travelling over seven million kilometres in 22 months to test the oils. Yet the information gathered about motor oils in the test is just as relevant to Australians as to US readers. Because of the international spirit of co-operation, *Consumer Reports* allows us to republish their results for you free of charge.

So your subscription to CHOICE doesn't just involve you with other Australian consumers, it links you to consumers all around the world. In an increasingly globalised market, that's a step in the right direction for consumer power.

Jane Mackenzie, Editor

Your letters

We welcome the letters you send us — please always include a daytime telephone number so we can contact you quickly if we want to follow your letter up. We're sorry we can't personally answer every letter we receive, but we do use them in our research. Thanks for taking the time to keep in touch.
Write to us at CHOICE, 57 Carrington Road, Marrickville 2204.
Phone us on (02) 9577 3399.
Fax us on (02) 9577 3355.
email us at ausconsumer@choice.com.au
World Wide Web address: www.sofcom.com.au/ACA/

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Find out how to be prepared for a fire, how to fight one, and which fire extinguisher to choose.

9 **Where there's smoke...**

... there should be a smoke alarm — it's the number-one tip for making your home a safer place. This report covers how to choose a smoke alarm, where to install them, and much more.

Cover photo: Tony Ishak, courtesy NSWFB

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Just desserts; no new charge for 013 directory assistance; dangers of laser pointers; diet books criticised.

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Price differences for motor oils of the same grade can be considerable — but are they justified? Recent tests suggest their performance is similar, so you can buy on price.

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This question is the bottom line for most consumers about the renewed proposal for a goods and services tax in Australia. Who might end up paying less tax and who more, and what would cost more or less?

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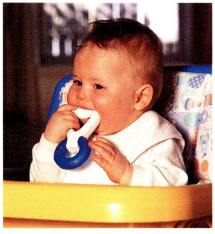

Are some chemicals in the environment affecting the way humans and animals reproduce? Might they be responsible for the increasing incidence of some cancers and even threatening our intelligence? This report takes a look at the controversy and profiles some of the current suspects.

22 **Buying an investment property**

Property investment isn't as easy to make money out of as it was in the 1970s and '80s, but it still might deliver more profit than cash investments and more security than shares.

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Don't be taken unawares when a pay TV salesperson comes knocking at your door — or you might be misled into buying the wrong services for your needs. Our report tells you what you need to know before you sign up.

Tests

9 **Smoke alarms**

As part of our report on protecting your home from fire, we checked out several widely available smoke alarms.

14 **Rating the airlines**

What do you hate about flying? Not enough leg room, uncomfortable seats, mediocre inflight entertainment and very average food, according to our survey. But CHOICE subscribers did single out a couple of airlines for a bouquet — or a brickbat.

33 **Canned or conned?**

How much actual food do you get when you drain away the liquid from cans of fruit, vegetables and tuna? And based on this, which brands are the best value for money? This report has the answers.

43 **Fax and figures**

You can now buy plain-paper fax machines from as little as $650 — which makes them attractive for home use as well as in your office. We tested seven of them for this report.

▶ *All the fax, man. See page 43.*

▲ *Which corkscrews make pulling a cork easy?*

Coming in the next three issues:

Tests: Reverse-cycle air conditioners, petrol lawnmowers, ladders update, fish, thermometers, saucepans, notebook computers, chardonnay, corkscrews, mini hifi systems, electric cooktops, VCRs, mobile phones.

Reports: Income protection insurance, the healthcare system, lemon laws, CHOICE's Annual Buying Guide, kitchen gadgets, vision care, how supermarkets make you buy, product certification schemes.

We try to bring you tests and reports in the planned month, but sometimes have to move an article because of problems that occur during testing and research, or for lack of space in a particular issue. We apologise if this causes any inconvenience.

CHOICE*cuts*

No charges for directory enquiries

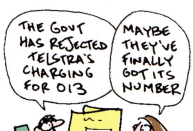
THE COMMONWEALTH GOVERNMENT has rejected a Telstra proposal to charge for 013 directory assistance services.

In July, Telstra made a proposal to the Government to introduce a charge of 50 cents for 013 services. The proposal included a rebate of $10 per year on customers' line rental charges, which Telstra claimed would make the service 'revenue neutral'. There would also be exemptions for people with disabilities that prevented them from using telephone books.

CHOICE's research had found that Telstra's proposal would impose too high a charge compared to the rebate offered. The additional profits made through charging would not have been passed back to consumers in the long term.

We commend the Minister for Communications and the Arts, Senator Richard Alston, for honouring the Government's pre-election commitment not to allow charging for directory assistance.

The Minister was required by law to seek a report from the Australian Competition and Consumer Commission (ACCC) before considering the proposal. The ACCC consulted a number of community and consumer groups, including CHOICE, in preparing its report. An important outcome of the decision is that it shows regulatory processes can be effective when they take into account the views of the wider community.



Can you help?

Eye care

CHOICE is preparing an article on looking after your vision, and would like to hear about your experiences. For example:

- Do you know the difference between an optician, optometrist and ophthalmologist — and who you go to for what?
- What experiences have you had with eye examinations — any pain or blurriness after? If so, were you warned to expect it or did it cause you any inconvenience (for example, you couldn't see to drive home)?
- Have you been satisfied with your contact lenses, glasses and their frames, and with their cost? What did you pay?
- Have you had laser surgery?

If you can help, please write before October 24 to CHOICE, *Eye care*, 57 Carrington Road, Marrickville 2204. Thank you.

Retirement villages

We're planning an article on retirement villages and would like to hear readers' experiences — they could be your own, your parents', or from other family members.

- What sort of village was it — for example, was there a hostel and/or a nursing home as well as private units?
- Were you happy with the services provided?
- Did you have any problems with the contracts — or any other financial problems?

If you can help, please write by October 31 to **Retirement villages**, CHOICE, 57 Carrington Road, Marrickville 2204 or fax us on (02) 9577 3377. Thank you.

Caution: lasers are not toys

LASER POINTERS ARE SMALL, HANDHELD DEVICES that are usually marketed as presentation tools — a useful way to focus an audience's attention by shining a bright red dot on an overhead slide, blackboard or screen.

Some laser pointers are shaped like ballpoint pens, while others are small enough to be placed on a keyring. Despite their compact size and relatively modest price, these devices can project a narrow beam of light over distances greater than 100 metres. If misused or not used carefully, they can also damage your eyes.

There have been several reports of high school students and teachers being temporarily injured as a result of being 'shined' by laser pointers.

The risk and severity of eye injury from a laser depend on a number of things — for example, the power of the beam, the angle it's directed into the eye and how long for.

A momentary glimpse of a low-power laser, for example, is not considered hazardous. However, the same laser could pose a threat if it were looked at continuously or viewed through binoculars.

Stronger lasers, on the other hand, can be hazardous enough to damage your eyes in a mere fraction of a second — quicker than you could blink or look away.

Because laser pointers vary in degrees of power intensity — and because some don't have any permanent warning labels — you should only use them with caution and care.

Don't be misled by the small size of a laser pointer, the lack of a warning label, or a manufacturer's claim that it's meant to be "fun" for playing with people or pets. Under no circumstances should laser pointers ever be aimed into any person's or animal's eyes.

Laser pointers have the hazardous potential to be unlabelled, misused, easily bought and too highly powered for practical purposes. CHOICE thinks all laser pointers should carry a permanent warning label regarding the possible risk of eye injury. We also think all laser pointers sold in Australia or imported from abroad should be restricted to the appropriate power level recommended by the Australian/New Zealand standard for laser safety.

The NSW Department of Fair Trading is currently gathering information to see what might be done to improve the safety of laser pointers. We'll be following its progress on this matter.

Don't 'shine' people with laser pointers — they can damage your eyes.

Just desserts

IF YOU'RE LOOKING TO CUT BACK on the fat in your diet, low-fat desserts are a relatively new option. But can you believe everything on the label? Here are two examples where CHOICE is sure you can't.

The promotional leaflet for **GISÉ Crème Glacé**, a soft-serve frozen dessert, says **GISÉ** is "high in calcium". However, our lab tests have found it to contain less than 10% of the 690 mg of calcium claimed on the leaflet for a 100 mL serve.

We also discovered enough lactose to potentially cause discomfort for someone who is lactose-intolerant, especially a young child. **GISÉ** is certainly not "virtually lactose-free" as claimed.

As a result of these misleading claims, the NSW health department is working with the importer of **GISÉ** to change the product's formulation and the nutrition information on its leaflet. And according to the National Heart Foundation, which is also investigating, **GISÉ** risks being disqualified from the Foundation's 'Tick' program as a result of the claims discrepancy. In the meantime, **GISÉ** has assured us it will not be distributing any more of the old leaflets.

VITARI Fruit Ice Confection has also had problems with its claims — two flavours claimed a zero sugar content, but in fact contained about 22% sugar. In July, the Australian Competition and Consumer Commission (ACCC) negotiated with **VITARI's** maker, Nestlé, to fix the labelling problem as it could pose a health risk to diabetics and was likely to mislead other health-conscious consumers.

The ACCC's Chairman, Professor Allan Fels said, "Companies should move very quickly to correct misleading product labels, especially where consumers' health and well-being might be affected."

Corrections

Not so dusty

August 1997

On page 37 we said the price range for replacement HEPA filters was $35 to $70. Dyson has since informed us that the price for its replacement HEPA filter is $19.99.

Fluoridation — friend or foe?

August 1997

In the margin on page 18 we said that "a cup of tea contains about 4 mg of fluoride — that's around 16 times as much as a cup of fluoridated water". This is incorrect. A cup of tea (250 mL) contains about 1 mg of fluoride — that's around four times as much as a cup of fluoridated water. But of course, the amount of fluoride can vary depending on the brand of tea, its strength and the length of time it's brewed, as well as on whether it's made with fluoridated or unfluoridated water.

Would you like to be part of a CHOICE test?

We're looking for subscribers who would be interested in helping with an article we're planning on food labelling. You would need to be able to come to our Sydney (Marrickville) premises for half a day on Friday, October 24, to look at food labels and give us your opinion about them. You'll also need to be willing to be photographed as we'd like to include the names and pictures of our volunteers in the magazine.

- We're looking particularly for people who read food labels when they shop.
- We're also interested in people who have particular requirements that make reading food labels important — for example, if you have diabetes, are trying to deal with a particular allergy, or looking to cut down on fats after a heart problem.
- We'd also like to include someone with young children and perhaps a student and an older person.

If you're interested in helping, please fax or write to us telling us a little about yourself and your immediate family, and any special things you check food labels for. Brief details of the ages and sexes of people in your household and a note of who's responsible for the shopping would also help us. Please include a daytime telephone number so we can contact you if necessary.

Write to **Food labels**, CHOICE, 57 Carrington Road, Marrickville 2204, or fax us on (02) 9577 3377.

It's official: no such thing as miracle weight loss

IN MAY CHOICE WE ALERTED YOU to the claims being made by one company about "nature's miracle trio" and the "massive" weight loss the company claimed was possible by following the recommendations in its book on *Honey, vinegar and garlic*.

CHOICE complained to the Australian Competition and Consumer Commission (ACCC) about these claims. After investigating, the ACCC has told the publisher, Nu-Life Publishing, to apologise to consumers who may have been misled by the claims made in its advertising for *Honey, vinegar and garlic — nature's miracle trio* and another publication, *Foods that make you lose weight*.

The Commission found that there is no scientifically accepted evidence that either garlic or vinegar can assist in weight loss in the way the company claims. It also noted that there is no such thing as 'negative calories' — all calories can be made into fat in the body. *Recalls and bans* on page 49 of this issue has the details of Nu-Life's apology for its misleading claims and information on how you can get your money back.

REPORT

Each year, domestic fires cause a great deal of grief and property damage all over Australia. While you can never completely rule out the chance of a fire in your home, we tell you how to reduce the risk: fighting a fire starts long before it ignites.

Fighting fire

IN BRIEF

- **This article gives tips on how to reduce the risk of a fire in your home — and how to increase your chances of escaping one unharmed (pages 6 to 7).**
- **The best combination of fire-fighting equipment for most homes is probably an AB(E) dry chemical powder fire extinguisher plus a fire blanket — see page 8 for more information.**

THE MAIN CAUSES OF DOMESTIC FIRES are unattended heat sources (such as stoves and heaters), electrical faults (such as short circuits, overloaded sockets and faulty appliances) and arson. How can you protect your home and family from them?

Preventing a domestic fire

There's not much you can do to stop pyromaniacs, and you can probably never completely rule out the chance of a fire in your home. However, keeping in mind the main causes of domestic fires, you can take a number of precautions which will reduce the risk:

- Don't leave cooking unattended.
- Install a safety switch that switches off the power when there's an electrical fault or a malfunctioning appliance. This not only helps prevent a fire but also reduces your risk of being electrocuted.
- Get frayed or damaged electrical cords repaired or replaced, and never run cords under rugs because they may overheat.
- Don't overload electric wall sockets.
- Don't smoke in bed.
- Don't operate heaters close to curtains, furniture or walls.
- Use a firescreen in front of an open fireplace to prevent embers falling onto carpet or rugs.
- Teach your children about matches, lighters and the dangers of fire as soon as possible.

Being prepared for a domestic fire

You can reduce the danger to both people and property if you're prepared for the event of a fire:

- The earlier you discover a fire, the lower the risk of injury and property damage. So installing one or more smoke alarms is a must (see *Where there's smoke ...* , page 9, for details).
- Get a fire blanket and/or a fire extinguisher (see *Fighting a domestic fire*, right, for details).
- Make an escape plan with your family and ensure that even very young children know the emergency telephone number '000' and how to use it.
- Think about the special requirements of small children and elderly or handicapped family members in a fire — they may need special assistance.
- If you deadlock your doors when at home, leave the keys in the lock or in a particular spot close by the door. Otherwise you may lose valuable time in a fire.
- Window grilles and locks make it harder for thieves to enter your house, but they may also make it harder for you to escape in a fire. For this reason, keyed grilles are preferable, and again, keep the keys near the windows.

How to behave in a domestic fire

Being prepared for a fire in your home is important in order to limit the damage. But a lot will also depend on how you behave when a fire happens.

The NSW Fire Brigades recommend that you **RACE**:

Rescue people in immediate danger if it's safe for you to do so.

Alarm the fire brigade by dialling '000' once you're outside.

Contain the fire by closing doors as you leave rooms.

Extinguish the fire if you know how to handle fire-fighting equipment properly, and if it's safe for you to do so (see *Fighting a domestic fire*, right, for details).

While these are the main steps you should follow, there are many more things to keep in mind about what to do if there's a fire:

- Have a clear plan of action that will help you keep a clear head instead of panicking.
- Assist small children and elderly or handicapped family members to leave the building as soon as possible — if it's safe for you to do so.
- A small fire may develop into an inferno in a matter of minutes. So don't try to rescue belongings — your life and others' are more important than possessions.
- Check with the back of your hand to see whether any closed doors are hot. If they are, don't open them — it means there's fire in the room behind them which may leap out at you (the 'backdraft' effect).
- Smoke rises to the ceiling. So if there's smoke get down on your hands and knees or lie flat and crawl out.
- If you can't reach an exit door, try to get into a room with a window and climb out. If you have to smash it, put something soft (for example, a piece of clothing) over sharp edges.
- If you're trapped upstairs, try to get into a room with a window facing the street so that the fire brigade can see you. Try to wait for help as long as you can. If there's not enough time, throw soft items (such as bedding or a mattress) out of the window to form a cushion and try to climb down (for example, down a water pipe). If you have to jump, lower yourself first as far as possible.
- If you live in a block of units, warn others if it's safe for you to do so. Use the stairs to escape, not the lift (there may be a power failure, or there could be smoke in the lift shaft) and call '000' yourself once you're outside — don't rely on others.
- If your clothes catch fire, drop to the floor and roll to extinguish the flames.

Fighting a domestic fire

Fire brigades usually recommend you don't attempt to fight a fire unless it's a very small one and you:

- Are well equipped (for example, with a fire blanket or an appropriate extinguisher).
- Know how to use the equipment and that it'll be sufficient to completely extinguish the fire.
- Are convinced it's safe for you to do so.

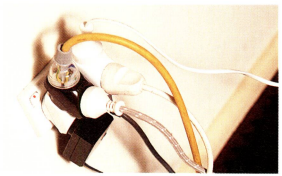
If you have any doubts: get out of there. If there's a lot of smoke developing it's time to have those doubts: get out of there. Don't put your life in danger.

There are two types of fire-fighting equipment available for domestic use — and both are suitable for small fires only: **fire blankets** (made from a fire-retardant material and designed to suffocate a fire) and **fire extinguishers**. Different types of extinguisher are suitable for different types of fire; see the table on page 8 for details.

Fire blankets

- Read the instructions carefully.
- Keep the blanket in the kitchen because it's most useful for fires involving cooking oils and fat.

Fire blankets are useful for kitchen fires, but only use one if you're sure it will completely cover the fire — otherwise it may lap around the edges and burn you.



Plugging too many things into one wall socket is an invitation for overheating and potentially a fire.

"Oh my goodness — the chips!" It may have been a good advertising slogan, but it's also a fact that unattended cooking is a major cause of house fires.

However, don't store it next to the stove — otherwise the fire may stop you from reaching the blanket.

- Only use the blanket if it's large enough to completely cover the flames. Otherwise they can lap around the edges of the blanket and burn you.
- Leave the blanket on the burnt item until you're sure the fire is out. Beware of oil fires — they can re-ignite if the oil is still hot. Don't take the blanket off until they've cooled.
- Throw the blanket away after you've used it once, and replace it. They're not reusable.

Fire extinguishers

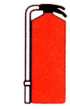
- Choose an extinguisher that's suitable for a wide range of fires, particularly ones involving electrical equipment or flammable liquids, because these are the most common domestic fires. The table below gives advice on which type(s) of fire extinguisher you'd be most likely to need in your home. For example, an AB(E) dry chemical powder extinguisher and a fire blanket for fat and oil fires would be a good combination for most homes.
- Make sure you read and understand the extinguisher's instructions. Test your knowledge regularly.
- Get your extinguisher checked regularly (at least once a year), or it may not work if you need it.
- Locate the extinguisher in an easy-to-reach place that's unlikely to be cut off by a fire.
- In a fire, make sure any extinguisher is suitable for that particular type of fire before you use it. If you use the wrong extinguisher you could make things worse.
- When operating an extinguisher, the fire brigade asks you to remember the **PASS**word:

Pull the pin or press the lever.
Aim low, at the base of the fire.
Squeeze the handle.
Sweep from side to side until you're sure the fire is out. ❑

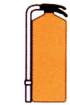
Which fire extinguisher is suitable for which fire?

	Suitable for this type of fire				
Type of extinguisher	Class A fire: Ordinary combustibles (wood, paper, plastics, etc)	Class B fire: Flammable and combustible liquids	Class C fire: Flammable gases	Class E fire: Fire involving electrical equipment	Class F fire: Fire involving cooking oils and fats
Water	✓ (2)			(6)	
Wet chemical	✓			(6)	✓ (2)
Alcohol-resistant foam	✓	✓ (4)			
AFFF-type foam	✓	✓ (5)			
AB(E) dry chemical powder	✓	✓	✓	✓	
B(E) dry chemical powder		✓	✓	✓	✓
Carbon dioxide	✓ (3)	✓		✓	✓
Vapourising liquid (1)	✓ (3)	✓	✓	✓	

(1) Fumes may be dangerous in confined spaces.
(2) Most suitable for this class of fire.
(3) Though not suitable for smouldering, deep-seated A-class fires.
(4) Most suitable for alcohol fires.
(5) Most suitable except for alcohol fires.
(6) Dangerous if used on electrical fires.

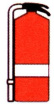


Water



Wet chemical

Alcohol-resistant foam/AFFF-type foam (check the label)



AB(E) dry chemical powder/B(E) dry chemical powder (check the label)

Carbon dioxide

Vapourising liquid

Where there's **smoke,** *there should be a* **smoke alarm**

Smoke alarms are the cheapest type of life protection you can get — buy one!

A DOMESTIC FIRE THAT TAKES more than 30 minutes to be detected is 15 times more likely to kill somebody than a fire that's detected after less than 15 minutes.

So a device that's likely to give you an early fire warning makes perfect sense. Even more so if the price for such a device can be as little as the cost of hiring *Backdraft* and *The Towering Inferno* from your local video shop.

Smoke alarms save lives ...

Basic smoke alarms only cost from around $10, and depending on the size and design of your home, one may be all you need to protect you and your family (see *Where to install them*, page 10, for details).

- A Victorian study estimates that between April 1992 and December 1994, 178 lives were saved directly as a result of installed smoke alarms.
- In NSW homes that had a smoke alarm installed, around three people were injured per 1000 domestic fires between 1987 and 1995 — and no-one was killed. This compares to 59 injuries and six deaths per 1000 fires in homes without a smoke alarm.

While most fires started between 5 pm and 7 pm (when a lot of people are at home, using cooking appliances and heaters), 63% of deaths occurred between 9 pm and 6 am — when people are most likely to be asleep.

You can't rely on your sense of smell to detect a fire when you're asleep because the carbon monoxide and other toxic gases in the smoke may mean you don't wake up.

... and limit loss of property

- In Victoria, property losses of about $18 million were prevented by smoke alarms between April 1992 and December 1994.
- Smoke alarms more than halved the property loss in NSW house fires between 1987 and 1995.
- In 1995, almost 4400 fires caused material damage of more than $55.6 million in NSW. That's around $9 per person — or, strangely enough, just about the price of a basic smoke alarm.

THE QUESTIONS

"Smoke detectors are now mandatory in new homes in Queensland and my postbox has been stuffed with advertisements for them. The products range in price from $7.95 to $134, so I asked for advice from the council and the fire brigade.

"The answers I got ranged from: 'They're all the same — buy the cheapest' to 'you get what you pay for — buy the dearest' and from 'you only need one' to 'you should have one in each room'.

"Depending on which advice I accept, I could end up paying $8 or $800. But would I get similar protection?"

S Ackerly, Longreach, Qld

THE ANSWERS

- **Once you've decided on which features you want (see page 12), buy the cheapest Standards-approved model you can find.**
- **See *Where to install them* on page 10 for details of how many you need and where to put them.**

The quotes, printed in *italics*, that you'll find throughout this article are from subscribers who wrote to us about their experiences with smoke alarms. **Thank you to everyone for your help.**

How they work

There are basically two types of smoke alarm for home use:

■ **Ionisation alarms** contain a small amount of radioactive material (see *Radioactivity in smoke alarms*, page 12, for details), which constantly produces charged particles (ions) in a test chamber. The flow of the particles is registered as a constant current. When smoke enters the test chamber, it interferes with the particles, the current is reduced — and the alarm goes off.

■ **Photoelectric (or optical) alarms** consist of a photo cell and a light beam shining away from the cell. If smoke enters the test chamber it deflects the light beam. Parts of the deflected light reach the photo cell — and the alarm goes off.

Ionisation alarms are more sensitive to invisible, charged smoke components (ions) than to visible particles. So they're better at detecting flaming, fast-burning fires which produce little visible smoke.

Optical alarms, on the other hand, rely on smoke particles, which makes them more sensitive to smouldering, flameless fires that produce a lot of visible smoke.

Since you don't know which kind of fire they'll need to detect, either is a better choice than no alarm at all. And almost all models on the market comply with the Australian standard, which requires them to fall within a certain sensitivity range. This means they should detect any kind of fire sooner than you would yourself, especially while asleep.

If you buy more than one alarm for your home it may be a good idea to get one of each type.

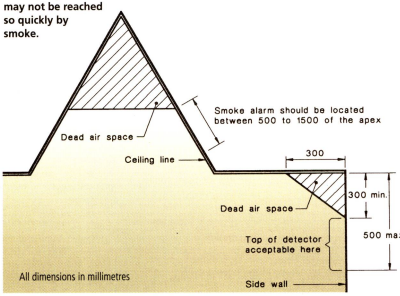


Figure 1. Don't put an alarm in a corner between walls or between a wall and the ceiling — the 'dead air space' there may not be reached so quickly by smoke.

Diagram from Standards Australia's publication SAA HB46-1993 *Guide to Residential Fire Safety*. Contact SA on 1800 029 955 or (02) 9746 4600 for a copy ($13.50).

Where to install them

The alarm's manual will give you instructions on how to install it; the following is a guide to where to put them:

■ The main purpose of a smoke alarm is to protect you and your family's lives. If you just have one, install it between the kitchen/living area and the bedroom(s) — for example, in the hallway. If you put it inside the kitchen you're likely to get too many nuisance alarms from cooking fumes unless you buy one with a 'pause' button — see *What to look for* on page 12 for details.

■ If your home has more than one level or more than one bedroom area, you'll need additional alarms.

■ An alarm in each bedroom might give you higher protection. For example, a study from Victoria University in Melbourne found that 85% of sleeping children and youths (aged between six and 17) didn't reliably wake up when a smoke alarm located outside the bedroom went off — even with the door open.

Nuisance alarms

Both ionisation and photoelectric alarms may be triggered by sources other than a fire, such as your toaster, grill or barbecue, or by dust, high humidity or insects finding their way into the test chamber.

"The alarm in the kitchen goes off about every second day because the toast ends up a little too brown. So we now call it the 'toaster alarm'."

R C, Sydney, NSW

"We have a number of different smoke detectors, all of which have gone off when there was no fire. This happens when the humidity is very high — which it is in Darwin for half the year. Many of our friends have the same problems with their detectors, and like us, they turn them off during the wet season. It would be nice if a detector was made that can actually be used for more than six months in Darwin."

F Schmidt, Darwin, NT

There are ways to avoid nuisance alarms:

■ Install the alarm away from appliances that may cause a nuisance alarm (such as the toaster); see *Where to install them*, above, for details. If you want a smoke alarm in your kitchen get one with a 'pause button' (see *What to look for*, page 12).

■ Vacuum your alarm regularly to avoid dust building up.

■ Alarms with a dual ionisation chamber should avoid nuisance alarms due to atmospheric changes such as high humidity or air pressure: while both chambers are affected by such atmospheric changes, only one of them can be penetrated by smoke. A sensor measures the currents in both chambers, and only triggers an alarm if there's a difference between them, not if the currents in both chambers change by the same amount. See the table on page 13 for details of the ones we tested.

If your detector still causes nuisance alarms, don't disconnect it or take out the battery. Try it in a different location (for example, further away from the kitchen). If that doesn't help, contact the manufacturer — a number of subscribers were able to have their over-sensitive alarms replaced.

■ Smoke generally rises and spreads out across the ceiling, filling a room from top to bottom. Put an alarm on the ceiling rather than a wall so it'll give you the earliest warning.

■ You need to avoid positions that may not be reached by smoke — so-called 'dead air spaces'. For example, don't put alarms in corners between walls or where the wall and the ceiling meet (see Figure 1, left) — install the alarm at least 30 cm away. With cathedral ceilings, the dead air space may even extend down to around 50 cm below the apex.

■ If you need to install your smoke alarm on a wall, fix it between 30 cm (to avoid the dead air space) and 50 cm from the ceiling. Don't go any lower or you may not be warned soon enough.

How to maintain them

A battery-powered smoke alarm can only warn you if it's functioning properly.

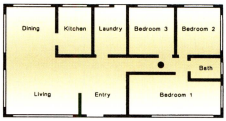
■ Test the alarm at least once a month by pressing the test button or shining a torch onto the alarm (the instructions should tell you which of these methods you can use).

■ Change the battery once a year (or earlier, if the alarm gives you a low-battery warning). This may be easier for you to remember if you do it on a fixed date — for example, your birthday or New Year's Day. Lithium batteries are supposed to last for up to 10 years and won't require such frequent changing.

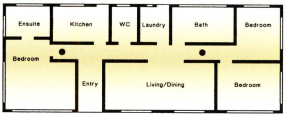
■ When you change the battery, complete the job right away. Don't take out the flat battery and plan to replace it later — you may forget to do it and be without protection. Press the test button to make sure the battery is installed properly.

■ Don't put the alarm back on the ceiling without a battery. Most models have some sort of mechanism to prevent this. However, they're more or less easy to tamper with or may not work at all.

■ Clean and vacuum the alarm every now and then to avoid the build-up of dust, as this could cause nuisance alarms (see below left).



Minimum smoke alarm installation — between the sleeping area and living/ cooking area.



If you have separate sleeping areas you'll need more than one alarm.

When you *must* install an alarm

All states and territories require you to install a smoke alarm if you build a new house or renovate an existing building to an extent where you need a council permit. In these cases, you'll need to install a Standards-approved mains-powered alarm with battery back-up.

In addition, Victoria requires you to install a Standards-approved battery-powered alarm if you're the new owner of an existing building. And by February 1, 1999, all existing buildings in Victoria must have such a battery-powered alarm.

Duracell problem

Douglas Gardiner, a subscriber from Portsea, Victoria, informed us about a problem he found with a certain batch of **DURACELL** batteries (**9 V, MN1604, "best if installed by January 2001"**), saying their negative (female) contact is too tight, which makes them very difficult to install.

We bought a couple of batteries from this batch and tried to connect them to different types of smoke alarm. Mr Gardiner is right: you'll have to use a lot of force to connect or disconnect the battery. Not only could this damage the alarm's circuit board or wires — it may also be a bigger risk for you because you could lose your balance when standing on a ladder. So be careful when installing a **DURACELL** 9 V battery from this batch.

The Victorian Department of Fair Trading has taken on the issue and asked for comments from **DURACELL**.

THE CHEAPEST INSURANCE WE'VE EVER BOUGHT

A few years ago, the kitchen of Ellen and Ian Lamont of Mt Kuring-Gai in NSW caught fire when they left a saucepan containing fat unattended on the stove.

Although their battery-powered smoke alarm was in a hallway outside the bedrooms, it detected the fire early enough: Ellen managed to suffocate it with wet towels before it could spread very far. "We consider our smoke alarm to have been the cheapest and best insurance we've ever bought."

Due to the extensive production of smoke, the Lamonts had to have most of the inside of the house repainted. However, the kitchen only needed minor repair. "Our insurance only covered us for replacement of items at current value. Had the damage been more severe and things like the stove, fridge or microwave needed replacement, we would have been up for a lot of money."

As a result of their experience, the Lamonts installed a second alarm closer to the kitchen and bought a fire blanket and a fire extinguisher. "And that Christmas all our relatives also received either a fire blanket or a smoke alarm."

WHAT TO LOOK FOR

Pause button (right, above) and escape light (right, below).

AS 3786 LIC 1256 Standards Australia

AS (top) and SSL (above) logos.

■ Whatever model you buy, make sure it carries either a **Standards Australia** or an **SSL** label (see left), certifying it complies with AS 3786.

■ **Battery or mains-powered**: Battery-operated alarms are cheaper, mainly because you can install them yourself, while mains-powered ones need to be installed by an electrician. All the alarms in the table are battery-powered — they need 9 V batteries.

Smoke alarms with an escape light need two batteries — one for the alarm and one for the light. The light battery always has to be an alkaline one. Some battery-operated models come with a lithium battery that's claimed to last up to 10 years.

Mains-operated alarms are usually backed up by a battery — so they'll still work if the power fails.

■ **Battery test**: All the battery-powered models tested check their battery and warn you when it needs changing — usually by beeping every few seconds.

■ **Alarm test**: All the models tested allow you to check that they're working — by pressing a button or, on some models, by shining a torch on the alarm.

■ **Hush button**: Pressing this button will silence nuisance alarms by desensitising the smoke alarm for a few minutes.

■ **Pause button**: This is a feature mostly found on models marketed as 'kitchen' alarms. It lets you avoid nuisance alarms by desensitising the alarm for a few minutes (for example, while you use the toaster or grill) and then it automatically resets to normal operation.

■ **Escape light**: This is a feature mostly found on models marketed as 'hallway' or 'stairway' alarms. When the alarm goes off, a built-in light will be switched on. This can be very helpful if there's a power failure as it'll allow you to see your escape route along a hallway or down the stairs, for example.

■ **Interconnection**: Most mains-powered and some battery-powered alarms can be connected to each other — if one of them detects smoke, all of them will sound.

■ For **people with hearing problems** there are special products available: ultra-loud battery alarms and mains-powered alarms you can connect to strobe lights and/or vibrating pads in your bed. For details, contact your state's Deaf Society, or Deafness Resources Australia (phone (voice): 1800 656 428, phone (TTY): 1800 642 664).

Radioactivity in smoke alarms

Ionisation alarms contain a small amount of the radioactive material Americium-241. The Australian standard for smoke alarms (AS 3786) requires them to carry certain labels:

■ "Warning — radioactive material."

■ The radioactivity symbol (see right).

■ The type and amount of radioactive material used.

■ "Return to supplier or Department of Health for disposal."

The radiation symbol should be on all ionisation alarms.

Reason for concern?

Quite a number of subscribers raised concerns about potentially hazardous radiation from these alarms.

"I have installed four smoke alarms in my house. What worries me and my wife: do they need to have radioactive material in them?"

R C, Sydney, NSW

According to the Australian Radiation Laboratory, the small amount of radioactive material isn't a health hazard:

■ The radiation from the Americium-241 one metre away from the alarm is minute — one-thousandth of the natural background radiation (cosmic radiation, radioactive materials in the ground and in building materials, etc).

■ One diagnostic X-ray will expose you to hundreds of times the yearly radiation from a smoke alarm, and wearing an LCD wristwatch about 10 times more.

■ Even in the very unlikely event that someone swallowed the Americium-241, it would pass through the digestive tract without causing harm: it's covered by protective silver foil, and even if that protection failed, the material wouldn't dissolve.

■ Due to the protective silver foil it's also very unlikely that the Americium-241 would vaporise in a fire and be able to be inhaled.

Don't throw them in the bin

Smoke alarms are expected to last about 10 years. As more and more people buy them, eventually more and more alarms will need to be disposed of. And as small as the amount may be, radioactive waste isn't supposed to end up in landfill. So don't just throw an old ionisation smoke alarm into the bin — return it to the supplier or your state's health department.

For more information, call your state/territory radiation control authority:

■ **ACT** — Radiation Safety Section, phone: (02) 6207 6946.

■ **NSW** — Radiation Control Section, phone: (02) 9795 5014.

■ **NT** — Radiation Health Branch, phone: (08) 8999 2714.

■ **Queensland** — Radiation Health, phone: (07) 3406 8006.

■ **SA** — Radiation Protection Branch, phone: (08) 8226 6520.

■ **Tasmania** — Department of Community and Health Services, phone: (03) 6233 6421.

■ **Victoria** — Radiation Safety Section, phone: (03) 9637 4181.

■ **WA** — Radiation Health Section, phone: (08) 9346 2261.

SMOKE ALARMS

Brand/model (in order of ease of use score)	Manufacturer / distributor	Origin	Target price ($)*	Warranty (years)	1 Noise level (dB)	2 Features	3 Interconnectable with ?? others	4 Ease of use score (%)	
IONISATION ALARMS									
FAMILY GARD FG888DCAUS	BRK Brands	USA	10.00	5	95			75	
FIRST ALERT SA150TTCAUS	BRK Brands	USA	36.00	5	93	Escape light, torch test		75	
FIRST ALERT SA67DCAUS	BRK Brands	USA	13.00	5	89			75	equal
FIRST ALERT SA88TTCAUS	BRK Brands	USA	25.00	5	91	Hush button, torch test		75	
FIRST ALERT SA91TTCAUS	BRK Brands	USA	20.00	5	96	Torch test		75	
RINGGRIP RSA-IB	RingGrip	Ireland	13.00	3	96			70	
RINGGRIP Escape Light RSA-IL	RingGrip	Ireland	39.95	3	93	Escape light	12	70	equal
RINGGRIP RSA-IS	RingGrip	Ireland	27.95	3	89	Hush button		70	
ARLEC SD400	Arlec	Mexico	15.00	5	101			65	
KAMBROOK SD 29	MEC-Kambrook	China	12.95	1	91			55	
UNIVERSAL Smoke Signal SS-750C	Universal Security	China	10.00	1	87			55	equal
UNIVERSAL Smoke Signal SS-755C	Universal Security	China	14.95	1	99	Pause button		55	
DUAL IONISATION ALARMS (should prevent nuisance alarms caused by atmospheric changes — see page 10)									
QUELL QSD 600B	Quell	Mexico	29.95	5	89	Pause button		70	
QUELL SA900	Quell	Mexico	29.95	10 (A)	99	Pause button		70	
WORMALD Alarm Silencer WRS100	Grinnell Detection	Mexico	25.95	5	88	Pause button		70	equal
WORMALD General Purpose C30M	Grinnell Detection	Mexico	13.95	5	96			70	
WORMALD Extra Life Battery WRS102	Grinnell Detection	Mexico	29.95	10 (A)	87	Pause button		65	
WORMALD For stairs and hallways WRS101	Grinnell Detection	Mexico	36.95	5	90	Escape light		60 (B)	
PHOTOELECTRIC ALARM									
RINGGRIP RSA-PC	RingGrip	Ireland	59.95	3	94		12	70	

* Prices shown are a good target to aim for when shopping around, based on a nationwide survey in April 1997.
(A) Model comes with a lithium battery that is expected to last up to 10 years.
(B) Connection of battery isn't foolproof (positive and negative may be switched accidentally).

1 Noise level

All the alarms tested are loud and produce a sound at a very noticeable frequency. However, one that's 6 dB more than another is twice as loud. So if you sleep very soundly or plan to install the alarm outside your bedroom and have the door closed, you may want to look for one of the louder models.

2 Features

See *What to look for*, left, for details.

3 Interconnectable

The number in this column tells you how many other smoke alarms you can connect to this model.

4 Ease of use score

The ease of use score is a combination of the following assessments, weighted as shown:

- Ease of changing batteries: 35%.
- Ease of installation: 15%.
- Ease of using test button / torch test : 20%.
- Instruction manual: 30%.

The test

We purchased all the battery-powered smoke alarms we found to be easily available in at least two states or territories, and that had been certified according to the Australian standard.

While we didn't test their performance, we consider that all alarms carrying the AS or SSL label will work well. So once you've decided on which features you want (for example, a pause button or an escape light), buy the cheapest Standards-approved model you can find.

The different ease-of-use scores are mainly due to the fiddly installation of some models (which is a one-off nuisance), and to potential problems when changing the batteries: some models can be installed with the battery the wrong way around or without a battery at all. While this may leave the alarm useless, you should be alerted to the problem right away when using the test button.

If you have problems finding a particular model, you may want to contact the manufacturer or distributor:

- **Arlec**, phone: 1300 360 670.
- **Family Gard/First Alert** (BRK Brands), phone: (02) 9891 2255.
- **Kambrook** (MEC-Kambrook), phone: (03) 9265 2222.
- **Quell Fire and Safety**, phone: 1800 654 435.
- **RingGrip**, phone: (03) 9212 1333.
- **Universal** (Universal Security Instruments), phone: (03) 9764 8277.
- **Wormald** (Grinnell Detection Products), phone: (03) 9584 2544.

Planning to book a flight? You might want to have a look at our reader survey first. From leg room and seat comfort to flight delays and food, we asked readers to rate the airlines they've flown both here and overseas.

Rating the airlines

IN BRIEF

- Singapore Airlines scooped the pool for customer satisfaction on international flights. As well as coming out on top for overall satisfaction, its customers praised it specifically for value for money, check-in efficiency and time, inflight entertainment, cabin service and the cleanliness of its toilets.
- Qantas and Ansett made it a dead heat for most aspects of domestic flights — all their satisfaction scores were within one to three per cent of each other. But we have news for Ansett: Qantas is beating it on image.

ALMOST EVERYONE HAS A NIGHTmare flight story to tell — either their own, or one they've heard — from unexplained waits for hours in departure lounges to blocked toilets on long-haul flights. But quite apart from these notorious bad-flight stories, we wanted to gauge overall customer satisfaction with popular air carriers. So we surveyed a random cross-section of readers in order to measure the performance of the domestic and international airlines they'd recently flown with.

From our survey results we've put together a table of ratings for assorted check-in counter and on-board services provided by several airlines. We also asked for your overall opinions of the airlines. Would you fly with them again or recommend them to a friend?

Domestic airlines

QANTAS and ANSETT had similar numbers of people who answered the survey flying with them on domestic routes, and most passengers flew economy class. Not surprisingly, the most popular domestic route was between Sydney and Melbourne.

For their check-in service and on-board performance our readers gave the two carriers remarkably similar scores. The overall satisfaction scores were also very close — see Table 1. Despite this, we found a clear difference in the general impressions these two airlines made. Compared with ANSETT fliers, a significantly higher percentage of respondents said they would definitely fly QANTAS again, would definitely recommend it to a friend, and considered it very good value for money.

Unless there are other aspects of flying that our survey didn't identify, these inconsistent results suggest that QANTAS is beating ANSETT on marketing and image: perceptions are beating reality.

Our survey also indicated that there were some elements of flying that domestic passengers found more trying than others. On average, about one quarter were dissatisfied with the quality of the food, while slightly more were unhappy with the amount of leg room and the inflight entertainment.

Almost one in five domestic fliers was unfortunate enough to have a flight delayed or interrupted by an unplanned event. Where these occurred, nearly half our respondents thought their airline dealt with the situation poorly or very poorly. "No reason given for the hour and a half delay," wrote Judy. "Was it because of bad weather? Did something fall off the plane?"

Only some of these delays were within the airline's control: just over a quarter were due to mechanical

problems, 13% were due to airport traffic and congestion, and another 12% were caused by connecting flights that weren't on schedule. However, that's no excuse for travellers who were treated like Judy and never given a reason for the delay.

International flights

Economy class is by far the most popular for international travel — it's here that airlines provide their most basic service, and it's what we rated them on (see *Our Survey*, right). Eight airlines had enough responses to be included in this report, and the most flown international routes were to and from Asia and North America.

Long flights can impose a tremendous burden on both mind and body. Even under the best conditions, 10 to 13 hours in a plane is never an easy ride — but having a comfortable seat, adequate leg room and decent distractions can help make a marathon flight seem a bit more bearable. Not surprisingly, international carriers received their lowest marks in these three areas (see Table 2 on page 16 for details).

For international travellers, delays or interrupted flights were a problem for 15% of all those surveyed. Forty per cent of those thought the airline dealt with the delay poorly or very poorly. Again, just over a quarter of the reported delays were due to mechanical problems, 11% were due to bad weather, and 9% were caused by connecting flights that weren't on schedule. **UNITED AIRLINES** had a significantly higher than average number of delayed or interrupted flights (27%).

Overall, **SINGAPORE AIRLINES** had significantly more passengers than average who were very satisfied and thought the airline represented very good value for money. Its passengers gave the airline significantly above-average marks for check-in efficiency and time, inflight entertainment, cleanliness of toilets and cabin service.

Our survey

Earlier this year we sent our Airline Satisfaction Survey to a random group of 15,000 CHOICE subscribers. From the responses, we included in our ratings those flight experiences that took place between January 1996 and May 1997. We also included only those airlines used by 50 or more respondents.

When rating the domestic carriers, responses from travellers in first class, business and economy were evenly spread between the two airlines, so we included them all. With the international carriers the spread was much less even, so for better comparisons we only factored in the responses from those who flew economy class.

- We asked people to rate nine factors concerning the airlines' performance.
- Then we gauged readers' opinions and impressions of their overall experience with a particular airline. Would you fly with them again or recommend them to a friend? Do you consider the airline good value for money?
- Finally, we asked about frequent flier programs. We wanted to know how many fliers took advantage of them and whether they were satisfied with the service provided.

CHANGING A FLIGHT EXPENSIVE

Bruce Cameron's seminar in Sydney finished earlier than planned. Instead of waiting for his evening flight back to Ballina, he called his airline to request a transfer onto an earlier flight. Unfortunately, Bruce was travelling on an advance purchase ticket.

ANSETT told him there were 13 seats available on an afternoon flight, while his evening flight was fully booked and had a waiting list. "I then asked if I could transfer rather than sit around at the terminal for several hours — and get back in time to see my wife in hospital," Bruce said. "The lady replied 'yes' — providing I paid another $104."

Bruce was perplexed. "You mean to say you would leave 13 empty seats and lose the opportunity to sell an additional fare on the [evening] flight?" he asked. "That's the way it is," the reservation operator remarked, and hung up.

ANSETT's response was that airlines need to impose conditions on discount fares. Without these restrictions, too many travellers would buy discount tickets rather than pay the full fare, which would be bad for business. While this might be reasonable in a general sense, it's still difficult to appreciate the airline's logic in a case like this.

Table 1. Airline satisfaction: domestic flights

Airline (number of responses), in order of overall 'very satisfied'*	**Would definitely fly again** (%)	**Would definitely recommend** (%)	**Very good value for money** (%)	**Check-in efficiency / helpfulness**	**Check-in time**	**Leg room**	**Seat comfort**	**Inflight entertainment**	**Quality of food**	**Cleanliness of cabin**	**Cleanliness of toilets**	**Cabin service**	**Overall satisfaction — % 'very satisfied'**
ANSETT (1308)	55	44	22	●	○	●	●	●	●	○	○	○	38
QANTAS (1268)	64	54	27	○	○	●	●	●	●	○	○	○	36
Average % very satisfied	60	49	25	64%	52%	14%	19%	16%	21%	57%	45%	45%	37

* Economy, business and first-class passengers.

KEY: ● 65% and over very satisfied ○ 50% to 64% very satisfied ○ 35% to 49% very satisfied ● 20% to 34% very satisfied ● less than 20% very satisfied

Table 2. Airline satisfaction: international flights

Airline (number of responses), in order of overall 'very satisfied'*	Would definitely fly again (%)	Would definitely recommend (%)	Very good value for money (%)	Check-in efficiency / helpfulness	Check-in time	Leg room	Seat comfort	Inflight entertainment	Quality of food	Cleanliness of cabin	Cleanliness of toilets	Cabin service	Overall satisfaction — % 'very satisfied'
SINGAPORE AIRLINES (101)	66	64	48	●	●	●	●	●	●	●	●	●	50
ANSETT (72)	66	59	44	●	●	●	●	●	●	●	●	●	42
AIR NEW ZEALAND (159)	52	43	34	●	●	●	●	●	●	●	●	●	39
BRITISH AIRWAYS (105)	40	39	21	●	●	●	●	●	●	●	●	●	36
CATHAY PACIFIC (79)	46	38	42	●	●	●	●	●	●	●	●	●	36
QANTAS (625)	66	59	30	●	●	●	●	●	●	●	●	●	36
UNITED AIRLINES (105)	44	36	32	●	●	●	●	●	●	●	●	●	31
MALAYSIAN AIRLINES (61)	33	31	30	●	●	●	●	●	●	●	●	●	30
Average % very satisied	58	52	33	62%	45%	11%	16%	24%	31%	57%	38%	47%	37

* Economy passengers only.

KEY: ● 65% and over very satisfied ● 50% to 64% very satisfied ● 35% to 49% very satisfied ● 20% to 34% very satisfied ● less than 20% very satisfied

For more independent travel information, CHOICE *Travel* takes you behind the brochures four times a year, with honest, down-to-earth advice on international destinations. It's reprinted by CHOICE from the UK Consumers' Association's travel magazine, and although written from a European base is useful and relevant for Australians travelling overseas.

At the other end of the scale, **UNITED AIRLINES** and **MALAYSIAN AIRLINES** had significantly fewer passengers than average willing to definitely fly with them again or definitely recommend them to a friend. **BRITISH AIRWAYS** also had a comparatively low percentage of prospective return customers.

While the satisfaction grades that international fliers gave **QANTAS** weren't outstanding, the airline again managed to come away holding one of the highest banners for customer loyalty and word-of-mouth endorsements — but in this case, along with **ANSETT**. ❑

On international flights

■ Check-in process

Most people were very satisfied with the efficiency and helpfulness of check-in staff. They were noticeably less enthusiastic about the time spent waiting to check in, particularly on international flights. **SINGAPORE AIRLINES** received very positive marks in these areas.

■ Leg room

"Five hours packed in like sardines in a can and not being able to move does take the enjoyment out of the flight."

This wasn't the only reference to tinned fish. In fact, an average of 39% of our respondents were either dissatisfied or very dissatisfied with the amount of leg room on their international flights. For the information of those going overseas, **ANSETT** was the only airline to receive significantly higher than average marks for leg room — although its score was still pretty poor.

■ Seat comfort

"My seat was so uncomfortable that I spent hours just standing at the rear of the plane."

This is another aspect of air travel which no one looks forward to, particularly on long international flights. Over 20% of international fliers responding to our survey were dissatisfied or very dissatisfied with the comfort of their seat.

■ Inflight entertainment

Good inflight entertainment is a surefire way to break the monotony of a long flight. While the majority of international air travellers were fairly satisfied with the distractions, over 20% were not. **SINGAPORE AIRLINES** came away with a rating that was significantly higher than average.

■ Quality of food

"I'd rather have nothing than pay for this 'food'."

No one is drawn to air travel by the lure of the inflight dining experience. Our survey indicated that a quarter of domestic fliers were dissatisfied or very dissatisfied with the quality of

Delays struck 15% of international and 18% of domestic passengers in our survey — and many of them were unhappy with the way the airline handled the situation.

Grading airline safety

Many air travellers would like to see each airline given an individual safety rating. A US organisation, the Air Travellers Association, recently devised a simple scale to do just that.

Looking at the number of fatal accidents in relation to the number of flights, the Airline Safety Report Card graded 260 carriers in 107 countries. Under the formula used by the Report Card, 29 airlines received 'fail' grades.

However, people on the safety side of the airline business warn that there is no general agreement on the criteria to determine individual airline ratings. Additionally, there are many factors that are simply beyond an airline's control — wind sheer, mistakes by other aircraft in the air or by air traffic controllers on the ground. Moreover, there is nothing to guarantee that an airline with a top safety rating won't have a mishap or experience some chance misfortune that would instantly — and randomly — alter its rating.

Until governments have devised or endorsed an accurate and reliable rating system which takes into account all relevant factors, air travellers might want to think twice before investing too much faith in the Report Card.

There is currently no accepted way to rate the safety of airlines.

Frequent fliers

Of the readers responding to our survey, just over half belonged to a frequent flier program. Most were with Qantas, Ansett, or United Airlines. Since becoming a member, 41% have received a free flight and 85% were fairly or very satisfied with the booking and points-accumulation service.

However, some frequent fliers said they felt slighted by ground staff and cabin crew because of the status of their ticket or upgrade. "All the attendants were lovely, with the exception of one," Michael Davis wrote, "who felt it was her responsibility to remind us that we were travelling on award tickets. She made us feel of less importance than the other travellers."

food on their flight. On international flights — which tend to be longer and therefore have more extensive catering — over 80% were either satisfied or very satisfied with the quality of food on their flight.

■ Cleanliness of cabin

An overwhelming majority of fliers, both domestic and international, were satisfied with the cleanliness of the cabin area on their flight.

■ Cleanliness of toilets

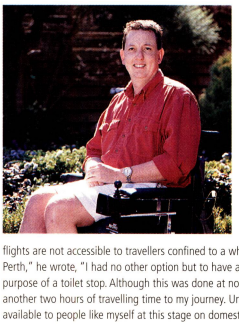
Understandably, domestic flights tend to be more tolerable in this area than international flights. It was one of the most varied areas of satisfaction on the international flights, ranging from over 50% of travellers very satisfied (**SINGAPORE AIRLINES** and **ANSETT**) to several airlines with only around a third of passengers giving them this rating.

■ Cabin service

"Service throughout the flight by cabin staff was minimal and, dare one say it, perhaps grudging."

Poor or discourteous service always leaves a lasting impression. Some readers, like the one quoted above, complained about being treated like a nuisance rather than a customer. For those who flew international, the cabin service grades varied across a wide band. Again, **SINGAPORE AIRLINES** received a significantly higher than average rating for its cabin service.

FLYING WITH A DISABILITY

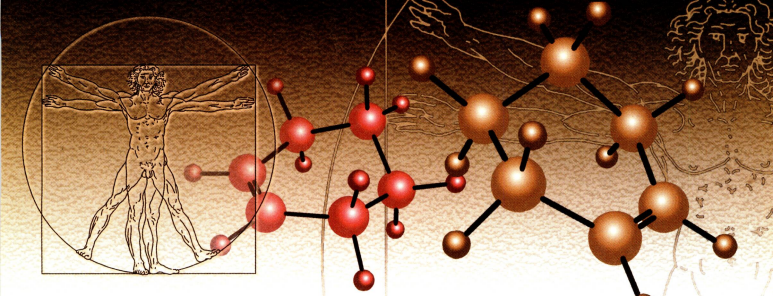


Peter Dymond (who is confined to an electric wheelchair) told us of his experiences travelling by plane. He noted the obliging assistance offered by both **QANTAS** and **ANSETT** and the help he's received from airline staff on the ground and in the air.

Peter complimented **ANSETT**'s program for regular travellers who have a disability, called Ansacare. It's a computerised database that simplifies the booking process by recalling a person's specific travelling needs.

On the inconveniences of air travel, Peter told us that toilets on domestic flights are not accessible to travellers confined to a wheelchair. "In order for me to travel to Perth," he wrote, "I had no other option but to have a brief stopover in Adelaide purely for the purpose of a toilet stop. Although this was done at no extra cost to me, it added almost another two hours of travelling time to my journey. Unfortunately there are no other options available to people like myself at this stage on domestic flights."

ANSETT confirmed this for its domestic flights, while **QANTAS** noted that it has a 767 making a daily return from Sydney to Perth. This plane has enough room to carry an on-board fold-out wheelchair that would allow some disabled travellers access to the toilet. However, this is the only **QANTAS** domestic flight that has this access.



Are there chemicals in the environment that are affecting the way humans and animals reproduce? Might they be responsible for increasing cancer rates and even threatening our very intelligence? This report takes a look at the controversy and profiles some of the current suspects.

Hormone mysteries

IN BRIEF

- The science behind the theory that some chemicals may disrupt hormones is in its infancy, and there are no firm answers as to whether we're genuinely at risk.
- The suspect chemicals are everywhere and avoiding them would be quite difficult.
- There's a serious lack of information about what chemicals we are exposed to through products and industrial emissions.
- Some countries have already identified as 'undesirable' some of the chemicals mentioned in this article, and are phasing them out.

OVER THE LAST FEW YEARS, YOU might have heard sensational claims that chemicals in the environment are turning boys into girls. It started with bizzare reports about alligators with shrinking penises, and continued with claims that human sperm counts were drying up. These frightening developments were said to be linked to chemicals in the environment dubbed 'gender benders'. All this and more, said some, meant we could be "stealing our future".

But what is the truth behind this doomsday scenario? This article will give you some background to one of the hottest human-health controversies since the publication of Rachel Carson's *Silent Spring* — the book which first sparked the debate over the dangers of pesticides. The difference here is that the suspects could be as close to home as your children's teething rings and the fillings in your mouth, and their effects even more insidious.

While the jury is likely to be out for a very long time on this issue, CHOICE thinks you have the right to know about some of the main chemicals currently under suspicion, and at least some of the things you can do if you're worried.

Hormones and 'endocrine-disrupting' chemicals

The world is made up of natural and man-made chemicals; the question is, can some of them upset our hormones? Hormones help to guide the development and functioning of the reproductive, nervous and immune systems of humans and other animals. Among other things, they help to control the sexual development of the foetus. Different hormones act like keys that lock into different cells of your body and tell them what to do and when. The organs and glands that produce hormones are collectively called the endocrine system and include the ovaries, testes, pancreas, thyroid and pituitary glands.

It's been known for some time that human food and water supplies may contain substances which can act like hormones in the body. These have the potential to block or change the shape of the 'lock' (the hormone receptor on the cell), changing which messages are sent and when. However, it wasn't until the late 1980s that some researchers began to worry about mounting evidence that this could pose a problem to human health.

Over the previous two decades researchers had noticed strange things happening to wildlife that they thought could be associated with environmental factors. This included reproductive disorders which suggested that something could be interfering with the normal action of sex hormones. After years of laboratory work, it's now generally accepted that exposure to high levels of man-made 'endocrine-disrupting' chemicals (EDCs) are likely to have contributed to such phenomena.

We don't generally experiment directly on humans, but some unfortunate experiences have shown how chemicals which act via the endocrine system can go wrong. The drug diethylstilbestrol (DES) was given to pregnant women from the 1940s to the 1970s in an attempt to prevent miscarriages and avoid pregnancy complications. It's since been found that there's a higher rate of reproductive disorders among the children of these women — and there's some controversial evidence to suggest that the male children tend to have lower sperm counts.

Some researchers started putting two and two together. They thought that the similarity between the endocrine systems of humans and other animals could mean that chemicals in the environment may be affecting human hormone systems as well as those of wildlife. These researchers wondered if what appeared to be trends in human health, such as falling sperm counts and increased rates of breast and testicular cancers, could be attributed to EDCs. And with the recognition that EDCs had the potential to interfere with hormones other than just those involved in sexual development — thyroid hormones, for example — there was concern that behavioural problems such as hyperactivity and learning disabilities might also be linked to these chemicals.

Such scientists believe there is now enough evidence in support of this hypothesis to justify precautionary action by governments to reduce our risk of exposure to EDCs.

Could there really be a risk?

One of the most controversial questions is whether we're exposed to high enough levels of these chemicals to cause harm. Some scientists believe we shouldn't be concerned about the hormonal effects of many of the man-made chemicals we're inadvertently exposed to, as they appear to be much less potent than substances formed in our own bodies from naturally occurring plant chemicals — and some of these even appear to be therapeutic in adult women (see *Phyto-oestrogens*, page 21).

Other scientists, however, believe our bodies deal with man-made chemicals quite differently — after all, they say, we have evolved with plant chemicals. They argue that because of this, and because some man-made chemicals are so persistent and accumulate in the body over a long time, even low doses of them may have an impact — and therefore current safety limits may be inadequate.

These scientists worry that while adults may turn out to be quite robust when it comes to the impact of hormone-like chemicals, unborn and young children may not be — especially if the mother has a lot of these chemicals in her body. Some man-made chemicals are stored in fat deposits and are released during pregnancy and lactation.

However, other scientists, and most government bodies and industry groups, believe that further research needs to be done before we can be sure which, if any, chemicals are really a problem, and if so what should be done.

Children may be more at risk from endocrine disrupting chemicals than adults.

Some of the suspects

The difficult thing about chemicals that act like hormones is that the suspects seem to be everywhere — from plastics and pesticides to naturally occurring foods like soybeans. Some are even used therapeutically — hormone-replacement therapy and birth-control pills, for example. Many more are distributed in the environment as a result of industrial processes and can reach you through food, water and air.

It should be emphasised that we know relatively little about the impacts chemicals can have on our endocrine systems. Those chemicals discussed here are not necessarily the ones we should be most concerned about; they just happen to be among the few that have been studied.

Pesticides

A large number of currently available pesticides are suspected of being EDCs.

If you want to minimise your exposure to pesticides, here are a few things you can do:

- Eliminate the use of them in your home and garden as far as possible.
- Encourage organic farming by buying organic foods (we'll be covering this in an upcoming issue).
- If you're in areas commonly sprayed with pesticides (for example golf courses), be careful to keep

Heavy metals

Heavy metals such as lead are also suspected EDCs — CHOICE, May 1995, gave advice on reducing your exposure to lead.

If you want to reduce your exposure to pesticides, you can order *Safer Pest Control* from the CHOICE book catalogue mailed with this issue.

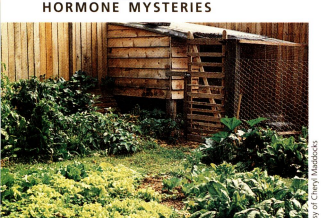


Photo courtesy of Cheryl Maddocks

Eat more plant foods and fewer fatty animal products to help minimise your exposure to one group of suspected EDCs — persistent organic pollutants.

your hands away from your mouth and wash them carefully.

Persistent organic pollutants

This group of chemicals has been the most extensively studied with respect to endocrine-disrupting effects — it includes polychlorinated biphenyls (PCBs), dioxins and some pesticides such as DDT. They have a long life, and extensive use of them in the past means they're widespread in the environment. Because they're fat-soluble, they're found especially in animal fat.

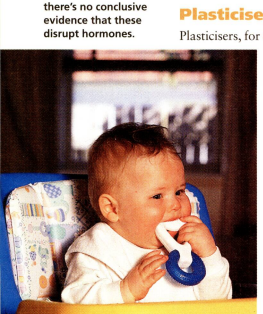
If you want to minimise your exposure to persistent organic pollutants, here are a few things you can do:

- Eat fewer fatty animal products and more plant foods.
- Don't eat fish you've caught yourself unless you're sure the water isn't polluted.
- Choose products which you know are not chlorine-bleached (for example, check the label of tampons and tea bags) as these are likely to contain less of the chemical dioxin.
- Be careful of handling old timber, which may have the wood preservatives pentachlorophenol or tributyltin on it (for example, fence posts, railway sleepers and power poles).

It's possible that plasticisers may leach from some PVC products, but so far there's no conclusive evidence that these disrupt hormones.

Plasticisers

Plasticisers, for example phthalates, are used to help keep PVC plastic flexible in products such as toys, teething rings, shower curtains, floor coverings, car dashboards and some food wraps.



There's limited evidence that phthalate plasticisers may have an effect on the reproductive systems of laboratory animals. Whether this is by disrupting hormones directly and whether they could affect humans in this way is highly controversial. Nevertheless, many experts agree that unnecessary exposure to plasticisers should be avoided.

Plasticisers can leach from PVC plastics into air, food or water. In Europe, they were recently found to leach from certain teething rings at levels above officially accepted standards. Some European retailers have withdrawn PVC baby products and soft toys for children under three years old. While many PVC toys are sold in Australia, plastics and toy manufacturers believe that, on balance, the evidence supports the safety of plasticisers.

Phthalates have also been found in food, including infant formula, in the UK, although at doses that most authorities regard as too low to have any impact on human health (see *Could there really be a risk?*, page 19).

While plastic food wraps by and large are claimed not to contain plasticisers, some, such as microwave wrap and wrap used by retail outlets, do.

If you want to minimise exposure to plasticisers:

- Minimise your use of flexible PVC products — these may be called 'vinyl' or labelled with the symbol shown on the right. Some examples are:
  — Toys and baby products, especially those which children will put in their mouths.
  — Vinyl flooring, as plasticisers are known to be given off to the air.
  — Some wrap used at the point of sale will be PVC; in case it is, rewrap the food when you get it home.

Bisphenol A

There's some evidence that the additive bisphenol A (used as a hardener in some paints, varnishes, resins, plastics, lacquers and epoxy glue) may be an EDC. Lacquers and resins containing bisphenol A are used to line some food cans. Water supply pipes, bottle-top linings, dental resins and floor coverings may all contain bisphenol A. Polycarbonate used in construction materials, CDs, car components, computer housings and, occasionally, food containers also contains bisphenol A.

Research has shown that it can leach from lacquers into cans, from dental resins into saliva, and from polycarbonate into food. The chemicals and plastics industries state there is no evidence to suggest that bisphenol A in consumer products could be harmful. Manufacturers of cans say the levels of bisphenol A leaching into food from cans is well below current safety limits. But there's a fierce debate among some scientists as to whether even tiny quantities of these chemicals can have endocrine-disrupting effects (see *Could there really be a risk?*, page 19).

If you want to reduce your exposure to bisphenol A, here are a few things you can do:

Shampoos and other personal products and cosmetics may contain chemicals which add to the load of possible hormone disruptors in the environment.

■ Consider alternatives to composite resins when having dental work — there are other options for 'white' fillings, although they may not last as long or be as cheap.

■ Minimise your use of epoxy resins, glues, varnishes and paints.

Alkylphenols

Another group of chemicals suspected of being EDCs is alkylphenols, which are the breakdown products of alkylphenol ethoxylates. According to the Commonwealth environment minister, Senator Robert Hill, alkylphenol ethoxylates are used in Australia in some detergents, shampoos, shaving creams and other cosmetics, in the spermicide nonoxynol-9 and in some paints and pesticide formulations. They may also be discharged into the environment by the agricultural and industrial sectors.

There's strong evidence from overseas that alkylphenols in sewage and run-off can be toxic to, and accumulate in, fish. Manufacturers, on the other hand, say the accumulation in fish is not significant, and they cite evidence that the chemicals are rapidly metabolised and excreted in mammals and so would be unlikely to cause reproductive and developmental effects.

If you want to reduce your use of products containing alkylphenol ethoxylates:

■ One label name for alkylphenol ethoxylates you can look out for is 'nonoxynol' (with a number after it) on cosmetics, contraceptives and toiletries. The problem is, however, that this is only one of a number of possible names that could be used, if the ingredient is listed at all.

■ Minimise your use of pesticides, as alkylphenol ethoxylates may be present in the formulation but not indicated on the label, because they're not an 'active' ingredient.

■ Avoid industrial detergents used by professional cleaners, some of which contain alkylphenol ethoxylates. However, the major Australian manufacturers assure us their domestic laundry detergents and other household cleaning agents don't.

Phyto-oestrogens

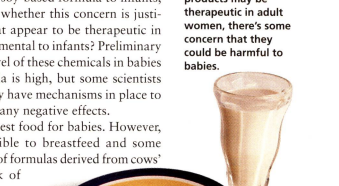
Certain chemicals produced by plants can be converted by the body into chemicals that mimic the hormone oestrogen. These so called 'phyto-oestrogens' are widespread and are thought to be an important part of a balanced diet. In addition, some foods containing phyto-oestrogens are being promoted as having therapeutic effects — soy products, for example, may reduce the symptoms of menopause.

Some people argue that it's important to distinguish between endocrine 'disruption' and endocrine 'modulation'. 'Disruption' has negative connotations, and one argument is that not all the changes are negative. For example, some of these chemicals are used therapeutically.

The soy connection, however, recently raised concern over feeding soy-based formula to infants, although it's unclear whether this concern is justified. Could levels that appear to be therapeutic in adult women be detrimental to infants? Preliminary studies suggest the level of these chemicals in babies fed soy-based formula is high, but some scientists think that infants may have mechanisms in place to protect them against any negative effects.

■ Breastmilk is the best food for babies. However, it's not always possible to breastfeed and some infants are intolerant of formulas derived from cows' milk. Given the lack of specific studies on the effects of soy-based formulas, these are best used only when there are no alternatives. ❑

While the phyto-oestrogens from soy products may be therapeutic in adult women, there's some concern that they could be harmful to babies.



In summary

Of the tens of thousands of chemicals used commercially in Australia today, only a fraction have ever been tested for their full range of hormone-disrupting effects.

While specific screening tests are being developed, it's likely to be years before chemicals are routinely tested.

In the meantime, some countries have already identified as 'undesirable' some of the chemicals mentioned in this article and are phasing out their use.

While scientists argue over whether we're at risk from chemicals suspected of having hormone-disrupting effects, consumers are by and large in the dark. There's a lack of public information about which chemicals are used or discharged into the environment by particular industries. There are also less than adequate labelling laws. And manufacturers can invoke 'commercial confidentiality' to keep some ingredients secret. CHOICE thinks this highlights the need for better laws to protect your right to know. As part of this we want to see:

■ A standardised and comprehensive chemical-labelling scheme for products.

■ A national database of chemicals, their manufacture, their waste products and their effects. The data collected and reported must be consistent Australia-wide, verified for accuracy and linked to ongoing research efforts.

What's presented in this article is by no means comprehensive, and many uncertainties remain. If you're concerned and are prepared or able to change your lifestyle a little, you can use this article as a starting point to reducing possible exposure to suspected hormone disruptors.

Before you buy a house or unit as an investment, do your homework. There may be something of a prices boom, but it's not happening everywhere.

Buying an investment property

IN BRIEF

- Property investment is no longer as easy to make money out of as it was in the '70s and '80s.
- Negative gearing — investing in property at a loss to get tax deductions — was at its most profitable when there were high inflation, high capital gains, higher marginal income tax rates and no capital gains tax. Today's circumstances couldn't be more different.
- Nevertheless, an investment in a quality residential property is likely to make you more money over the long term than putting the same amount into a cash deposit, and is generally less risky than investing in shares. But you have to put up with a certain amount of hassle!

PROPERTY IS A LONG-TERM INVESTMENT. THE EXPENSES THESE days of getting into and out of property are very high when compared with other types of investment. People who tell you it's easy to make money out of property are living in the 1970s and '80s, not the '90s!

Having issued that warning, we can nevertheless go on to say: as a long-term investment, property has much to offer. It's an important part of a balanced investment strategy.

But just how much property is enough? The best form of property investment is when you buy your home. Here you enjoy perhaps the most powerful tax concession on offer in Australia: any gains in the value of your home are yours to keep *tax-free*.

Having ploughed most of your worldly assets into buying a home, you already have a large stake in the property sector of the economy. Before you make further investment in property it might be wise to consider putting a significant proportion of your savings into the two other principal sectors: shares and cash-based investments (such as term deposits, cash management trusts and the like).

Why? When property prices are down, maybe share prices or interest rates on cash deposits might be high. And when prices are down in one sector, they can be down for five or more years.

In this report we'll look at a modest investment in residential property — a small home unit, for example — as well as the option of indirect investment via a property trust. In Part 1 we'll run through the research side of planning your investment. In Part 2, starting on page 25, we'll turn to the money side.

PART 1
Your research

When preparing to invest in property you need to come to an understanding of the economy ("Is it a good time to buy?") and the local area of your search ("Which property will make a good investment?"), as well as an assessment of your short-listed choices.

The economy

The economy sets the scene for investment growth. There are many economic indicators that have something to say about the state of the economy and the potential for growth, but we've chosen five of particular interest:

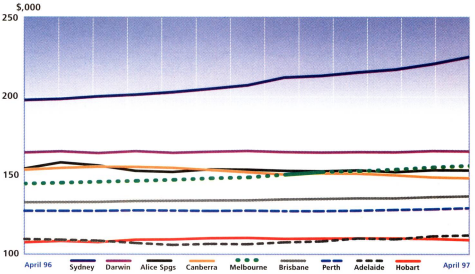


Figure 2. Median house prices — every city has its own trend. The median is the middle price — half the sales are for less and half for more. The moving annual median is based on the monthly figures for the past year. As a new monthly figure is obtained, it's added to the figures for the preceding 11 months and the total figure is divided by 12 to arrive at the new moving annual median. It's used to illustrate trends and to make comparisons between cities over time. (Source: *REIA Market Facts*, April/June 1997.)

■ **Inflation.**

The cost of living, as measured by the consumer price index (CPI), has settled below 3% per year. In Australian terms, this is very low. It indicates the economy is pretty flat, with little growth. A 'growing' economy needs a growth in 'real' gross domestic product (GDP) of at least 4% per year ('real' means the amount of GDP above the inflation rate); during 1997 the growth rate has been only about 2.7%. Inflation also has implications for potential capital gains: property prices, as a general rule, rise as the cost of living rises. In the late '80s inflation was around 6% per year.

■ **Interest rates.**

We're now experiencing the lowest mortgage interest rates for 30 years. You can get an investment loan for around 7% per year. That means property is more affordable now ... or is it?

Plummeting interest rates — with five drops in the last year — have not necessarily improved your financial position if you look at the overall picture. You may be paying less interest on the mortgage for your investment property, but you're also receiving less rent and the potential capital gain on the property is likely to be lower. The 'real' interest rate has dropped only slightly despite a nominal drop in mortgage interest rates of around 10% since 1990. (The real interest rate is the inflation-adjusted rate.) Look at the gap or margin between the mortgage rate and the inflation rate shown in Figure 1. "If the gap is not closing, money is not becoming cheaper in real terms," points out Hans Kunnen, Head of Investment Markets Research for First State Fund Managers.

■ **Broad price trends.**

What is happening in residential property around Australia? Robert Mellor, Director of Building Services at BIS Shrapnel, comments from their research that the market is doing well in Sydney and Melbourne (with anticipated growth of 35% to 40% by 2000), fair in Brisbane and Perth (anticipated growth of 25%), and flat in the other capitals. Although other experts may not be so optimistic, there's action both up and down across the country — see Figure 2 for some details.

■ **Employment.**

Australia's unemployment rate seems stuck between 8.5% and 9% — see Figure 3. That's very high by Australian standards. High unemployment and poor job security create a fearful climate in the community — not a positive sign for growth in property prices.

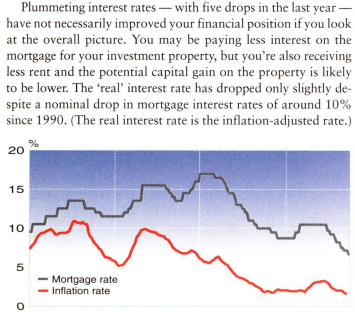


Figure 1. The mortgage interest rate compared to the inflation rate. The mortgage rate has remained well above the inflation rate — this means interest rates remain high in real terms (after accounting for inflation). It's been that way since the early 1980s. (Source: RBA/Treasury.)

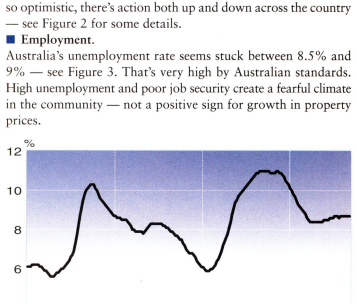


Figure 3. Unemployment trend — high unemployment and poor job security aren't a good sign for a growth in property prices. (Source: ABS/Colonial State Bank.)

■ **Immigration.**
Immigrants need homes, both to rent and buy. It's a matter of simple supply and demand — as fewer immigrants arrive, the demand for a place to rent or buy suffers. And the numbers here are significant. We're now a long way short of the picture in 1988, when the net gain from immigration hit a high point of 173,000 people.

What we are seeing, however, is a big shift in population from the southern states to Queensland and WA: see Figure 4.

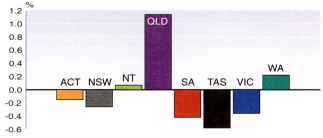


Figure 4. The rate of net interstate migration gain or loss over 1995/96. Demand for housing accompanies population movements. Within Australia we are seeing a sizable drift from the south to the north. (Source: ABS.)

The area

Then there are the things you should investigate about the particular area you're considering:

■ **Local price trends.**
Read the real estate pages in the local newspaper of areas you're considering, stop outside estate agencies and look at the prices, check auction results in local or major newspapers, and ask neighbours for local intelligence.

■ **Existing services.**
You're taking a big investment risk if you buy an investment property which is distant from the services people want: schools, public transport, business districts, parks, beaches, rivers, shopping centres, hospital, university, jobs, etc.

■ **Vacancy rates.**
You'll need a tenant in order to earn rent and pay the mortgage.

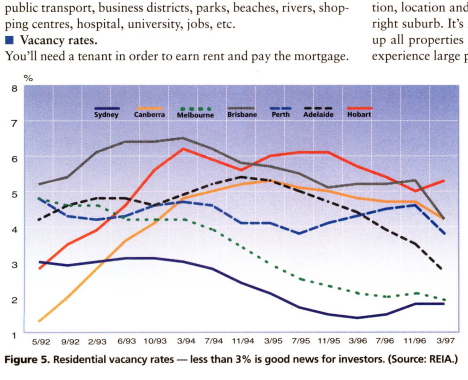


Figure 5. Residential vacancy rates — less than 3% is good news for investors. (Source: REIA.)

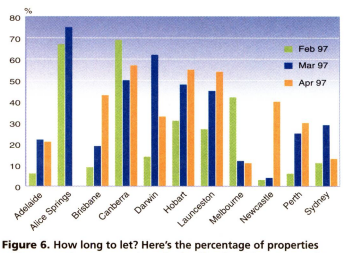


Figure 6. How long to let? Here's the percentage of properties taking more than two weeks to let in all major cities across a three-month period (February to April 1997). (Source: REIA.)

Without a tenant you'll go backwards, financially, very quickly. The key issue here is: how long might it take to find a tenant if the property becomes vacant? The Real Estate Institute of Australia (REIA) publishes what are called 'vacancy rates' for tenanted houses and units in capital cities: see Figures 5 and 6. As a guide, a vacancy rate of less than 3% is good for investors. But this is city-wide information — check with local estate agents about the vacancy rates in your area of enquiry.

CHOICE tip: In a good location in Sydney or Melbourne, plan on at least one month each year without income from a tenant — and much longer elsewhere. Students, for example, often move back home or travel over the long summer break.

The property

Finally, you need to focus on a particular property:

■ **Location.**
The three golden rules for property remain, as always, "Location, location and location". That means the right street, in the right suburb. It's rarer now to find that a property boom picks up all properties in a particular suburb. The 'good' properties experience large price rises, but there will still be duds. Appearances can be deceptive: a run-down house can be a quality investment, while a fully renovated house might be overcapitalised and hard to sell.

■ **Condition.**
What work needs to be done? You don't want to spend too much, and renovating a kitchen or bathroom is very expensive relative to the rent you're earning.

■ **Rent.**
In previous periods of boom, investors were hooked on capital growth. Now they're focusing on the 'yield' — the income generated from rent. For example, a property worth $200,000 and rented for $200 per week is showing roughly a 5% annual return ($10,400 divided by $200,000).

This is *gross*, of course, not *net* — there are lots of expenses: insurance, mainte-

nance, rates, gardening, fees charged by the managing agent (if you don't want to collect the rent yourself) and possibly land tax. Five per cent before these costs, as you can probably guess, is a very modest return on your investment. These days you really want to see a bit more of a yield than this, unless the property has good potential for significant capital gain.

■ **Planned development.**

When a solicitor or conveyancer works on the purchase of a property they check it out thoroughly. However, they may make no enquiries about the neighbouring properties. One recent case we've heard about involved a person who bought a ground floor unit which had a lovely sunny, private courtyard. Within weeks of moving in, she found the next-door neighbour was putting a second storey onto his home which would block out the sun from the courtyard.

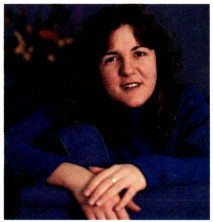
Although the local council had sent notices of the development to all neighbours, the information had not been passed to the new owner of the courtyard unit. And while it might be possible to take someone to court over this mess, what would it take to make things 'right'? There may be no good solution.

Prevention is the best course. This means you must go to your local council and make your own inquiries:

■ Are there any development applications for adjoining properties?

■ Are there any significant development applications for the area generally? For example, ask council's town planners about proposals for new shops, churches, schools, roads and road widening, subdivisions, home unit blocks, easements, covenants, second-storey additions, garages, pergolas ... in fact anything which grows, smells or makes a noise!

"I'M NOT GOING TO WORRY"



"I've lived in that area for most of my life," said Maria, when asked for the reason why she bought an investment property in Earlwood, a suburb on the southern side of Sydney. "It's close to the city and very quiet — a family suburb with lots of children. There's the train, bus services and a primary school just around the corner. And prices are going up too."

Maria's two-bedroom unit is one of 12 in a 26-year-old building. Ongoing costs were important to her when she was working out which property to buy. "For every unit I went to see, the first thing I asked the estate agent was 'How much are the unit levies?' "

Having seen the problems her parents experienced when collecting the rent from their own investment property, Maria has decided instead to employ a managing agent to run the unit for her. "I'm not going to worry about the day-to-day stuff. I'll let the managing agent handle the running around and the problems."

Apart from thorough research before making a purchase, there are two other pieces of advice Maria passes on to others:

■ "Two-bedroom units didn't seem to cost much more to buy than a one-bedroom unit, and I have a much larger range of potential tenants."

■ "I could have bought in a cheaper area, but I always had at the back of my mind that one day I might want to live in this unit. You've got to be comfortable with the area."

PART 2
The money side

Borrowing to invest

Security is a big issue for investors — and financial institutions have finally recognised the importance of helping customers minimise their exposure to risk. The result is a range of loan types, including these:

■ **Variable interest.**

This is the situation with the common home loan. The interest rate varies from time to time, going up and down according to the state of the economy and the marketing policies of the lenders. Table 1 on page 26 shows the monthly repayments on a range of loans at different interest rates.

■ **Fixed interest.**

No matter what happens to interest rates, you go on paying a set rate for the term of the loan (usually limited to five years, at which point the loan type is reassessed to another fixed rate or another type of loan).

■ **Part variable, part fixed.**

You can, for example, select 30% of the loan to be at a fixed rate (for security) and the remaining 70% at a variable rate (which is currently lower and cheaper).

There is another way

If you don't have enough free cash to afford to buy a property, you can nevertheless participate in the market through a **property trust**. By joining your money with others', you can buy into more locations and more types of property, thereby spreading the risk. Other advantages include:

■ You don't have to handle the administration and paperwork.

■ You don't have to deal with tenants and disputes.

■ Units in a property trust which are **listed** on the stock exchange can be bought and sold like shares — with no advertising, conveyancing or estate agent fees. There will be stamp duty and brokerage, however.

■ You still benefit from tax deductions such as depreciation (handled for you by the trust management).

As an alternative to a 'listed' trust, there are also **unlisted property trusts**, for which units are bought and sold like other unit trusts, via a prospectus. Listed property trusts own shares in companies which own property, whereas unlisted property trusts can also own property directly.

Unit trusts carry their own fee structure — often something like 4% to 6% as an entry fee. You'll need at least $1000 to start buying into a property trust, which is quite a lot cheaper than buying the property itself.

■ **Capped loan.**
The interest rate is variable, but can only rise to a pre-determined level during the life of the cap. For a fee, your bank or other lender will wear the risk of a large rate rise, but you can still enjoy the benefits of a rate fall.

■ **Collared loan.**
Here limits are set on rises *and* falls in interest rates.

In our current low-inflation environment there is much to be said for choosing a low variable rate rather than a fixed rate, if you can afford to run the risk. If your circumstances are less robust, ask lenders about the other options. For more on mortgages turn to CHOICE, June 1997.

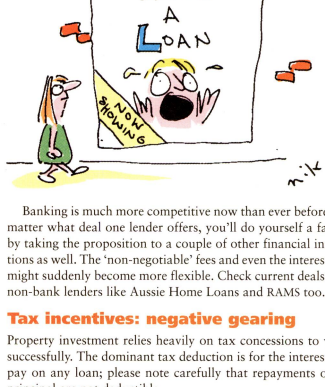
When discussing a loan with your bank or other prospective lender, ask about:

■ **Fees.**
Watch out for high monthly fees as opposed to a single annual fee. Every lender has its own unique set of fees. In practice they're negotiable — for example, there may be a discount if you already have a loan or credit card through that financial institution. Establishment fees vary and can be difficult to compare. Early-exit costs on fixed-rate loans can be high. Ask for the full picture on fees.

■ **The loan-to-valuation ratio.**
It's possible to borrow 100% of the value of the investment property if you have a good income and substantial other assets (such as your own home). However, some lenders will place limits on how much money you can borrow, expressed as a proportion of the value of the property. For example, the bank may limit its lending to '90% of valuation'.

■ **The income test.**
Limits are usually imposed on the borrower's annual repayments — these limits are expressed as a percentage of household income. For example, loan repayments might be limited to 35% of a couple's gross household income. The test may vary from one lender to another.

■ **Mortgage insurance.**
Lenders like to get as much protection as they can. If a customer wants to borrow a high proportion of the value of the property, the lender can reduce the risk of the deal by making you take out mortgage insurance. Typically this obligation arises where the loan-to-valuation ratio is around 75% or above. For a once-only, upfront fee, the insurance protects the lender (not you, the borrower) should you default on the loan.



Banking is much more competitive now than ever before. No matter what deal one lender offers, you'll do yourself a favour by taking the proposition to a couple of other financial institutions as well. The 'non-negotiable' fees and even the interest rate might suddenly become more flexible. Check current deals with non-bank lenders like Aussie Home Loans and RAMS too.

Tax incentives: negative gearing

Property investment relies heavily on tax concessions to work successfully. The dominant tax deduction is for the interest you pay on any loan; please note carefully that repayments of the principal are not deductible.

If the costs of owning the property exceed the income (rent), you're making a revenue loss on that investment. That loss can be turned into a tax deduction against any other income you earn, whether from salary or other investments. That's called **negative gearing.**

Over the last decade the shine has gone off negative gearing for all but those with high incomes. You must remember that negative gearing means you're making a **loss** on the investment — you need other income to supplement the costs. If you lose your job, or interest rates rise, you might be caught with too little income to meet your commitments.

Negative gearing was at its most powerful in an earlier time of high inflation, high capital gains, higher marginal income tax rates and before there was a capital gains tax. That's very different from now.

Table 1. **The monthly repayments on a range of loans at different interest rates. In times of low inflation (like now) you can get a good deal with a cheap variable rate — but if rates started to go up you could end up paying several hundred dollars a month more than you would now. You need to assess your ability to absorb such increases when deciding what type of loan to take out.**

Table 1. Monthly loan repayments

	@ 7% per annum			@ 9% per annum			@ 12% per annum		
Amount borrowed ($)	5 years (I)	15 years (P&I)	25 years (P&I)	5 years (I)	15 years (P&I)	25 years (P&I)	5 years (I)	15 years (P&I)	25 years (P&I)
50,000	292	450	354	375	507	420	500	600	527
80,000	467	719	566	600	811	671	800	960	842
100,000	584	899	707	750	1014	839	1000	1200	1053
150,000	875	1349	1061	1125	1521	1259	1500	1800	1580
200,000	1167	1798	1414	1500	2028	1678	2000	2400	2106

I Repayments of interest only — you are making no repayments of the principal of the loan.
P&I Repayment of principal and interest.

Other worthwhile tax deductions exist, including:

- Repairs (the plumber's bill).
- Maintenance (the gardening).
- Unit levies, rates, insurance.
- Fees charged by the managing agent for collecting rent, etc.

Depreciation

There are two types of **depreciation**. The first covers the fittings and contents of the property, ranging from the kitchen cupboards and floor coverings to the curtains and any furniture you own. The tax office can supply you with a booklet setting out the different rates and the period of years over which you can make a deduction for these things.

The second type of 'write-off' covers the building itself — but not all buildings enjoy this benefit, which depends on the date of construction.

Repairs are also an area where investors can get into trouble. The tax office doesn't treat improvements as deductible in the same way as repairs are. If you patch a leaking roof, that's a repair. But if you replace the roof (or a substantial section), you have actually improved the building: it's a capital improvement. Not all is lost, however. Whereas a repair is deductible within that current year, the cost of many capital improvements can be written off over a number of years.

■ **Watch out for this trap:** Repairs carried out soon after you purchase the property may not be deductible. It's likely the tax office will say these costs are reflected in the (lower) price you paid for the property — and they are therefore 'capital' in nature, rather than maintenance costs. So you can't buy the worst house in the street and expect an immediate tax deduction for improvements.

Tax disincentives: capital gains

If you sell a property for more than you paid for it, you might have to pass a portion of the 'profit' to the Commonwealth Government by way of tax. This is called the capital gains tax (CGT). It affects assets such as real estate, shares and many belongings that were acquired (purchased, given or inherited, for example) **after September 19, 1985**. Although your home is usually exempt from CGT, a residential property investment is most definitely caught by the tax.

To make the tax fairer, it is calculated on any gain in value of the property after allowing for the effect of inflation on the price ('indexation').

You're only liable for this tax when you dispose of the property, by sale or otherwise. The net gain (some expenses are deducted) is added to your taxable income in the year of the sale.

Clearly it's important to maintain good financial records about your investment property, including the dates and amounts for all rent, mortgage payments, maintenance and other expenses. A worked example of a CGT calculation is shown on pages 28 and 29 (questions 3 and 4).

■ **Watch out for this trap:** Buying and selling within 12 months. If you sell your investment property within 12 months of having purchased it (calculated from the dates of entering

PREPARING YOURSELF TO INVEST

1. If you own your home, the first thing to decide is whether you should invest further in property or in some other asset with the potential for good capital gain as well as income, such as shares. It isn't all rosy:

■ Shares may seem riskier, but you don't have to invest in high-risk companies, and the costs associated with buying and selling shares are lower than those for buying and selling property.

■ Much of the rise in value of the property over the medium term may come from money you put into it for renovations, extensions, landscaping, etc. The costs of doing this come out of money on which you've paid the full rate of income tax.

2. If you decide to go for an investment property, start reading the property and money (personal finance) sections of the daily newspaper, as well as some magazines (such as *Personal Investment*) which cover property. However, be aware that the property and investment industries have a significant interest in hyping and stimulating the market. Maintain a healthy scepticism.

3. Look at property sales advertisements in your local suburban or town newspaper. Track certain types of property over a period of two or three months and note:

■ Which types of property sell quickly and which ones linger?

■ Which ones sell at auction and which ones fail?

Try and isolate trends in:

■ Price range (for example, below $100,000; $100,000 to $150,000; $150,000 to $200,000, etc).

■ Location (particular streets; near the park; near the shopping centre, etc).

■ Style (for example, Federation, Victorian, modern).

■ Format (for example, home unit, freestanding house, terrace or semi-detached house).

■ Features (for example, two, three or more bedrooms, pool, large backyard, privacy, modern kitchen or bathroom).

4. Work out how much money you're prepared to invest from your savings and how much you're prepared to borrow. Consider also:

■ Can you afford to continue with the investment if interest rates rise by as much as 5% (see Table 1 on page 26)?

■ What will happen if you lose your job? How safe is your work position?

■ Obtain quotes for income protection insurance and take it out if you can afford it (we'll be covering this in a future issue).

5. Consider your mental and emotional capacity to deal with the real human and financial problems of being a landlord. If you feel too vulnerable it might be preferable to look into property trusts instead of direct investment in real estate (see *There is another way* on page 25).

6. Save your deposit — and don't forget to allow for the conveyancing and finance costs.

7. Discuss these important taxation and planning issues with an accountant:

■ In whose name should I purchase the property? (For example, solely in my own name, in the joint names of myself and my partner, or in a company name?)

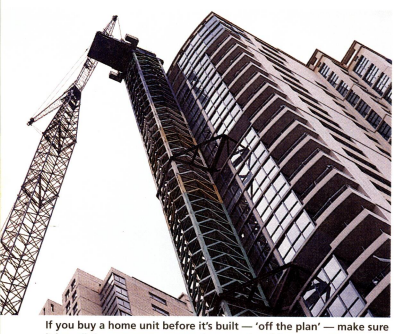
■ Should I negatively gear the investment or not?

■ When should I buy the property?

■ Tax: land tax, capital gains tax and provisional tax.

■ Building repairs and improvements.

8. Having chosen your preferred locality and established the price you're prepared to pay, try and stick to your plan.



If you buy a home unit before it's built — 'off the plan' — make sure it has all the necessary approvals to go ahead (see page 29).

the contracts), you lose the benefit of indexation for inflation when capital gains tax is assessed. The whole capital gain, if any, will be added to your income for tax purposes.

Other taxes to watch out for

■ **Land tax:** This is a state tax on property wealth; each state taxes at its own rate. Your home is currently exempt. Contact the Land Tax Office in your state for the conditions and rates.

■ **Provisional tax:** If you earn $1000 or more in investment income (such as rent) in any one financial year you may be liable for this Commonwealth tax. However, if the property runs at a loss you probably won't be assessed. Provisional tax is tax paid in anticipation of the next year's income.

Understand the risks

The risks of property investment are many, including:

■ Difficulty finding a tenant … or finding a difficult tenant!

■ You may be looking forward to a time of capital gain from your investment, but in the meantime you're carrying a financial burden through your life. You therefore need a hefty, regular and reliable disposable income.

Making the figures work

How does the money side work out in practice? It can be quite complicated, so we've simplified a few of the figures here in order to show you a number of important outcomes from a potential investment:

1. What is the effect of the investment on your personal income tax?
2. How much has it cost you to own the property for the first year?
3. What's the potential capital gain?
4. What capital gains tax would you have to pay if you sold the property after five years?
5. Are you ahead after five years?
6. How does this compare with putting the money into a cash deposit?

These are the assumptions on which the example is made:

■ Purchase price of an investment property on July 1, 1997: $200,000 **(A)**

■ Deposit of $60,000.

■ Annual loan repayment on a mortgage of $140,000 @ 7% per annum, principal and interest reducing, over a 20-year term: $13,025 **(B1)**

■ Average interest component over first five years: $45,889/5 = $9178 **(B2)**

■ Finance expenses (stamp duty, bank establishment fees): $1000 **(C)**

■ Purchase expenses (conveyancing fees, stamp duty, search fees): $7000 **(D)**

■ Annual expenses (necessary repairs and maintenance, managing agent's commission on rent collection, rates, insurance): $3500 **(E)**

■ Gross (non-rent) income of owner: $60,000 pa **(F)**

■ Rent @ $200 per week, over a period of 11 months (allowing one month of vacancy per year): $9533 **(G)**

For simplification, we'll assume the rent, annual expenses and interest rate don't change during the term of ownership — otherwise we'll have even more figures flying around than we do already.

If the property is sold exactly five years later:

■ Sale price at June 30, 2002, assuming a growth of 5% each year: $255,250 **(H)**

■ Sale expenses (conveyancing fees, agent's commission, advertising): $8000 **(J)**

■ Assuming inflation runs at 3% per annum for 1997-2002:

— Consumer Price Index number for June 1997 quarter: 120.2 **(K)**

— Consumer Price Index number for June 2002 quarter (estimate): 139.3 **(L)**

1. What is the effect of the investment on your personal income tax?

■ Before purchase (ie June 30, 1997):

Gross income of investor from all sources **(F):** $60,000

Income tax payable on **(F)** (excluding Medicare levy): $18,802 **(M)**

■ One year after purchase (June 30, 1998):

Calculate gross income **(F)** plus rent income **(G)** less annual expenses **(E)** less interest-only portion of the mortgage repayments for one year **(B2)**:

$60,000 + $9533 – $3500 – $9178 = $56,855.

Income tax payable on $56,855 = $17,324 **(N)**

■ By subtracting **(N)** from **(M)** we arrive at the **tax saving** provided by this investment after the first year: **$1478 (O)**

This is a situation where the investment has been negatively geared. Bear in mind there may be further factors, including land tax and possible depreciation on the building and so on, which could affect this calculation.

2. How much has it cost you to own the property for one year?

Loan repayment **(B1)** + expenses **(E)** – rental income **(G)** – tax saving from negative gearing **(O)**

= $13,025 + $3500 – $9533 – $1478

= $5515 **(P)**, or around **$106 *net* every week**. Can you afford it?

Let's assume you sell the property after five years. Has it been worth it?

3. What is the capital gain made on the sale?

We calculate the net capital gain by working out the **cost base** for the investment (the purchase price + purchase expenses + finance expenses) and adjusting for inflation.

■ Negative gearing is not as attractive as it once was, and the current tax debate includes discussion about limiting its tax benefits further. Back in 1985 the Federal Government removed the tax benefits of negative gearing from property investment. Two years later the deduction was reintroduced, following a collapse in the availability of rental accommodation.

Some people wonder whether these events mean the government would be unwise to get rid of negative gearing, but the connection may be purely circumstantial. At that time housing interest rates were deregulated, there was excess supply of properties and for many different reasons investors had lost interest in residential property. The risks for property investors in a reduction of negative gearing, however, are real. ❑

THINKING OF BUYING 'OFF THE PLAN'?

Many home unit, townhouse and villa developments are put up for sale before construction work has even commenced. If you want a brand-new home of this type it's often the case that you need to get in quick and buy 'off the plan'.

This means entering a contract to buy the property when all you've got to go on is an architect's plan of the building and unit, a written list of fixtures and finishes, and a drawing of what it should look like.

Is it wise to buy at this stage? Effectively it's sight unseen.

People with experience in property development know there can be many a slip along the way. Shirley Colless, a Councillor with North Sydney Council, has seen what can go wrong. "It's not necessarily the case that all approvals have been obtained when the property is first marketed. You've got to ask: 'What is the status of approval?', and 'Are the building plans in final form?' and 'Is the property caught up in litigation with the local council?'. The council may impose conditions on construction which mean the plans must change."

The important question: has the local council approved the plan?

In one recent case a couple bought a unit off the plan, only to find that the development was before the court. In the end the court said it could not be built. Although the couple got their deposit money refunded, they missed out on the home they wanted and had lost time as the market moved on without them.

■ Purchase price **(A)** + purchase expenses **(D)** + finance expenses **(C)**
= $200,000 + $7000 + $1000
= $208,000 **(Q)**: this is the **cost base**

■ Now, to adjust for inflation we use the CPI index numbers:
Cost base **(Q)** x [index number for sale quarter, June 2002 **(L)**, divided by index number for purchase quarter, June 1997 **(K)**] + sale expenses **(J)**
$208,000 x 139.3/120.2 + $8000
= $249,052 **(R)** This is the **indexed cost base**

■ To find the **net capital gain**, subtract the indexed cost base **(R)** from the sale price **(H)**
= $255,250 – $249,052
= **$6198 (S)**

4. What capital gains tax would you have to pay if you sold the property after five years?

■ Your income tax before the sale: $17,324, which is item **(N)** above.

■ Your income tax after the sale is calculated:
Income = gross income **(F)** + rent income **(G)** less annual expenses **(E)** less interest-only mortgage payments averaged over five years **(B2)** plus net capital gain averaged over five years (**S** divided by 5)
= $60,000 + $9533 – $3500 – $9178 + $1240
= $58,095

■ Tax payable on this amount = $17,906 **(T)**
By subtracting **(N)** from **(T)** we arrive at the extra tax payable due to the capital gain
= $582 **(U)**

■ To get the **net capital gains tax** we multiply **(U)** by 5
= **$2910 (V)**

What does it mean? The investor would have to pay an additional $2910 in tax as a result of reaping a nominal, non-indexed capital gain of $55,250 on the sale of the property after five years of ownership (given an increase in value of the property of a steady 5% each year and an inflation rate set at 3% per annum).

5. Are you ahead after five years?

To answer this question we need to calculate the **total gain after tax**.

■ Nominal capital gain (**H** minus **A**) is $55,250 **(W)**

■ Expenses = net capital gains tax **(V)** + five years' losses after tax (**P** x 5) + finance expenses **(C)** + purchase expenses **(D)** + sale expenses **(J)**
= $2910 + ($5515 x 5) + $1000 + $7000 + $8000
= $46,485 **(X)**

■ By subtracting **(X)** from **(W)** we arrive at:
Net gain after tax = $8765 **(Y)**

■ But let's not forget your increased equity in the property, having been paying off the principal of the loan for five years:
Amount paid off loan principal = $19,236 **(Z)**

■ By adding **(Z)** and **(Y)** we get:
Total gain after tax = $28,001

In other words, if you sold the investment on these terms after five years, you would be better off by the equivalent of about $108 *net* per week for each week of the five years.

6. How does this compare with simply putting the money into a cash deposit?

We'll need to take as the deposit the capital put into the property purchase ($60,000) plus the additional money spent on the investment each year ($106 each week for five years, taken from P above). If you assume an interest rate of 5% per annum and allow for income tax on annual earnings from wages ($60,000) and from the deposit, you would find a total gain after tax (at a marginal income tax rate of 47%) of around **$10,308**.

With the property investment you've had all the hassle, but in the long term you've made more than the cash deposit would. A negatively geared portfolio of high-quality shares which come with 'franking (tax) credits' should return more than the term deposit too. But the risk, in CHOICE's opinion, is greater than that for buying a quality residential property.

Oils ain't oils?

Price differences for motor oils of the same viscosity and service grades can be considerable. But are they justified?

IN BRIEF

A large-scale comparative test of motor oils in the US showed:

- No discernible performance differences between oils of the same viscosity and service grades. See *The US test*, right, and *What it means for you*, page 32, for details on what the grades tell you.
- Oil change intervals as recommended by car manufacturers for 'normal' use are sufficient — even in relatively severe driving conditions.
- No measurable benefits from oil additives and engine treatments.

"THE SURPRISING TRUTH ABOUT motor oils" was the headline of a test carried out by our US counterpart, the Consumers Union (CU). "Our 4½-million-mile test with a fleet of New York City taxicabs turned some conventional wisdom on its head."

Oil companies spend millions of advertising dollars each year to convince you that their oil can make your car's engine perform better and last longer. And manufacturers of motor oil additives and engine treatments assert that their products offer engine protection that oil alone can't provide.

In CU's "most ambitious test project ever", they set out to discover whether such claims are fact or fancy.

The US test

CU tested 20 oils which met the US motor oil industry's latest standard at the time, and which were either of the two most commonly recommended viscosity grades in the US — 5W-30 and 10W-30.

- The 'W' means the oil can be used in winter. The two numbers on either side indicate these are multigrade oils that are effective over a range of temperatures.
- The first number is an index of how the product flows at low temperatures — the lower the number, the thinner the oil and the more easily it flows. For example, a '10' means the oil can be used in conditions down to -18°C, a '5' even below that — conditions rarely found in Australia.
- The second number tells you how it flows at high temperatures (when the oil should still be thick enough to protect the engine).

There are hardly any 5W-30 or even 10W-30 oils marketed here in Australia (you're much more likely to come across grades such as 20W-40 or 20W-50). In fact, none of the oils in the US test is available here.

However, we think the US results still provide relevant information for Australian motorists (see *What it means for you*, page 32).

Gruelling test conditions

One way to gauge the performance of motor oils is to test them on the road. CU did just that, using a fleet of 75 New York City taxis (see *Testing in the Big Apple*, page 32) — a method also used by the US oil industry itself.

The test conditions were gruelling: a typical Big Apple cab is driven day and night, and when they aren't on the go, they're usually standing at the kerb with the engine idling — far tougher on motor oil than highway driving. What's more, the cabs accumulate a high mileage very quickly, making them ideal for the test purposes.

However, they don't see many cold starts or long periods of high-speed driving in extreme heat. CU received several letters from readers questioning their findings because of that. Their answer:

"*A New York City taxi's life — relentless stop-and-go, hard driving, plus a significant amount of time spent idling with a hot engine — does promote engine deposits and wear. We believe that such severe service would have revealed differences among brands of oil.*"

No brand performed better

Every oil in the test was good at doing what motor oil is supposed to do: thorough statistical analysis of the test data showed no brand — not even the expensive synthetics — to be meaningfully better or worse in this test.

After each engine had run about 96,000 km during 10 months of seasonal changes, it was disassembled and the following points were checked:

■ **Wear on the camshaft and valve lifters:** The combined wear for both parts averaged only 0.066 mm. Even the engines with the most wear didn't reach a level where CU could detect operational problems.

■ **Wear on connecting-rod bearings:** These were weighed before and after the test. The wear on the key surface of each bearing averaged 0.24 g. Again, all the tested oils provided adequate protection.

■ **Sludge and other engine deposits:** The ignition process may cause engine deposits that can prevent oil from circulating freely, increase the engine temperature and make moving engine parts stick.

While sludge is more likely to form during cold starts and short trips, the build-up in the test engines was so light that CU didn't expect it to be a problem with any of the tested oils under most conditions. There was some build-up of 'varnish' (a hard deposit on engine parts) but no brand consistently produced more varnish than any other.

Lab analysis

CU also analysed several hundred samples of oil. Only a few failed to meet the viscosity standards for their grade, and those that did failed only marginally. No brand stood out as having a significant problem.

According to the laboratory tests, the two synthetic oils flowed exceptionally well at low temperatures, and also had the highest viscosity under high-temperature, high-stress conditions.

Oil change intervals

Most US car manufacturers recommend an oil change every 12,000 km (7500 miles) or a specific time interval (say, six months) for 'normal' driving, and every 4800 km (3000 miles) for 'severe' driving — such as frequent trips of less than six to eight kilometres, stop-and-go traffic, extended idling, towing a trailer or driving in dusty conditions.

To determine whether such frequent oil changes are really necessary, CU changed the oil in three cabs every 4800 km, using an oil brand that was also included in the main test (where it was changed every 9600 km). After 96,000 km they compared the engines — and found no meaningful differences.

On the basis of the test results, CU thinks the commonly recommended 4800 km oil change interval for 'severe' driving is "conservative" — even for the gruelling service experienced by the taxis in the test, a 9600 km interval was adequate.

They concluded that with modern oils, changing the oil according to the manufacturer's recommendations for 'normal' use should be fine in most conditions.

How you can save

We carried out a price survey in Sydney to find out how you can save when buying motor oil, following the US Consumers Union's general advice:

■ **Shop around: For example, we found the same 5 L can of 20W-50 brand-name oil for about $15 in one shop, and for $22 in another. Service stations can be more expensive than supermarkets.**

■ **Buy in bulk: Prices for 1 L containers of 20W-50 oil varied from around $5 to $7. If you buy four or five litres, you'll pay from less than $2 to $4 per litre.**

■ **Buy house brands: In the same shop we found 4 L of SF, 20W-50 oil for $6.30 (house brand) and for $10 (brand-name oil).**

■ **Service grade: Buy the service grade recommended for your car rather than a 'later' grade. For example, in the same shop, 4 L of SF 20W-50 oil cost $6.30, while 4 L of the more modern SJ 20W-50 cost $11. (See page 32 for more on service grades.)**

■ **There's a wide variety of engine and oil additives available. For additives marketed as oil treatment and (worn) engine treatment, you'll pay around $20-$40 per litre — money, the US test results suggest, you might as well spend on something else (see page 32 for details).**

Oil's not just oil

Motor oil is slippery — that's what helps protect an engine's moving parts. But motor oil does much more than just lubricate. It helps cool the engine, keep it clean, prevent corrosion, and reduce friction to improve fuel economy.

To do all that, refiners blend in various additives, which account for 10% to 25% of the product you buy:

■ **Antioxidants** prevent the oil from thickening when it runs hot for extended periods.

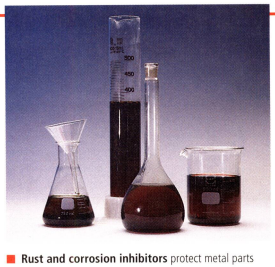
■ **Detergents** help prevent the formation of carbon deposits on engine parts and neutralise acids formed in the engine.

■ **Pour-point depressants** help the oil flow in a cold engine (especially in cold weather).

■ **Friction modifiers** strengthen the oil film and prevent unlubricated contact between moving parts.

■ **Viscosity-index improvers** modify the oil so its viscosity is more consistent over a wide temperature range.

■ **Dispersants** keep contaminants suspended so they don't form deposits in the engine.



■ **Rust and corrosion inhibitors** protect metal parts from acids and water formed in the engine.

■ **Foam inhibitors** collapse the bubbles churned up by the engine crankshaft (foam reduces the oil's lubricating effectiveness).

■ **Antiwear agents** provide lubrication when oil is squeezed out from between moving engine parts.

Engine treatments

CU also tested three engine treatments. These are added to the engine together with the oil and are claimed to provide protection from engine friction and wear for at least 40,000 km.

The products were used according to the instructions, each in three cabs. When the engines were checked for wear and deposits, no discernible benefits from any of the three products could be found.

CU's verdict: "We see little reason why anyone using one of today's high-quality motor oils would need these engine-oil treatments."

What it means for you

■ **Always use the viscosity grade (for example, 20W-50; see *The US test*, page 30, for details) and the service grade (for example, SH) recommended by your car's manufacturer.**

The service grade guarantees that oils carrying it meet minimum performance criteria — for example, regarding engine deposits, wear and corrosion. The US test results indicate that for modern motor oils, these minimum requirements provide adequate engine protection.

Service grades supersede each other — for example, SJ oils meet at least the requirements for SH, SG, SF, etc, oils plus additional performance tests. Using an oil of a later grade than the one recommended for your car usually won't hurt your car's engine, but may waste your money (see *How you can save*, page 31).

■ CU concluded that more extensive tests under other driving conditions may have shown up minor differences, but under the conditions of their test, oils of the same grade didn't show any meaningful differences. So, unless you think you usually drive under more severe conditions than a New York City taxi, you should be able to buy on price (see *How you can save*).

■ If you regularly drive under severe conditions (for example, high-speed driving in high temperatures or towing), synthetic oils may be worth considering.

■ **While your car is under warranty, always change the oil at the intervals recommended by the manufacturer.**

■ After that: if you're using a modern motor oil, the US test results indicate that an oil change as recommended by the manufacturer for 'normal' driving conditions (usually 10,000 km in Australia) should be sufficient — even if you sometimes meet the 'severe' criteria described in your owner's manual.

While more frequent oil changes won't hurt your car, they may hurt your wallet, contribute to the depletion of limited oil resources, and add to the problem of used oil disposal.

However, never wait longer for the oil change than the recommended interval for 'normal' use.

■ Older cars and frequent driving under severe conditions (for example, if you do mostly very short trips, drive a lot in dusty conditions or stop-and-go traffic, or do a lot of towing) may require more frequent oil changes. So do special engines such as diesels or turbos.

Testing in the Big Apple

CHOICE's US counterpart used New York City taxis to test motor oils — a method also used by the oil industry itself.

Of the 20 oils tested, eight were conventional 5W-30 grades and 12 were 10W-30 (nine conventional, two synthetics and one conventional/synthetic blend). Each oil was tested in three vehicles.

For the test, 1992-93 Chevrolet Caprice taxis with precisely rebuilt 4.3 L V6 engines were used. CU started by exchanging the motors of six cabs with rebuilt engines. These removed motors were then rebuilt and installed in the next six cabs and so on.

Using this rotation, 75 taxis were monitored over 7.2 million kilometres (4½ million miles) of driving in and around New York City.

A local workshop completely machined each engine block and crankshaft, rebuilt the cylinder heads, and installed new bearings, pistons, rings, seals, gaskets and oil pumps in each engine block. Though the engines originally had roller lifters and camshafts (a design that reduces friction), conventional sliding lifters and camshafts were installed to accelerate wear.

Before the engines were assembled, CU measured or weighed the parts most likely to show wear if the oil wasn't doing its job — the camshafts, valve lifters and connecting-rod bearings. Each cab went through a break-in procedure before hitting the road. During testing, engine timers were used to measure the time the engine was running and the time it was in gear.

Over 22 months, CU's engineers checked over 100 times on the fleet garage — usually without notice. They dropped off test oil and picked up samples of used oil for ongoing analysis. They also made sure that oil was being added to the engines when necessary, and that it was changed every 9600 km (6000 miles). This is about twice as long as US car manufacturers recommend for the severe service of taxis and was chosen to accelerate the test results and provide worst-case conditions.

After each 96,000 km test, they remeasured the key engine parts. They also examined combustion chamber deposits, the colour of the valves, scoring of cylinder walls and valve-deck deposits for any sign of engine problems.

In addition to the taxi tests, an independent lab tested the oils' chemical and physical properties — particularly their viscosity (or ability to flow; see *Lab analysis*, page 31, for details) in low temperatures as well as in high-temperature, high-stress conditions.

Canned or conned?

We took the tin opener to over 950 cans of food and sorted the solid from the liquid — and found there can be a big difference in value for money from brand to brand.

IN BRIEF

- For some canned foods there can be around 20% difference between brands as to how much actual food they contain once the liquid is drained away.
- In general, 'no-name' cans are good value for money on the basis of the cost per 100 g of fruit, vegetables or tuna they contain.

WHEN YOU BUY CANNED FOOD, how much are you paying for the food, and how much for the liquid it's packed in? To find out, we strained the contents of over 950 cans of nine types of popular canned food, including fruit (apricots, fruit salad, peaches and pineapple), vegies (asparagus, beetroot, corn and tomatoes) and tuna.

We found that usually 60 to 70% of the contents of the can was actual fruit, vegetables or tuna. For the different types of food, though, the differences between brands varied from as little as 7% for peach halves to 17% for tuna, 19% for asparagus spears and 23% for tomatoes.

For detailed brand information on how much food was in the cans, as well as price information, see the tables on pages 35 to 37.

Without labelling you'll never know

Over the years we've often called on manufacturers to label the solids content (or 'drained weight') on canned food — but we've never had any joy. These tests show, yet again, that if you care about how much actual food you're getting in a can, the net weight alone doesn't help you choose the brand that's the best value for money. You need the drained weight listed as well, plus minimum drained weight standards to be set and monitored.

However, the whole issue has been taken off the agenda of the Trade Measurement Advisory Committee (a joint state/territory and Commonwealth body which deals with measurement issues). CHOICE thinks the issue should be put back on the agenda, with a view to actually doing something about it. If other countries can do it (and they do), why can't we?

Which are worth their weight?

The tables on pages 35 to 37 list the canned foods we tested in order of least to most expensive within each food type, based on the price per 100 g of solid food in the tins.

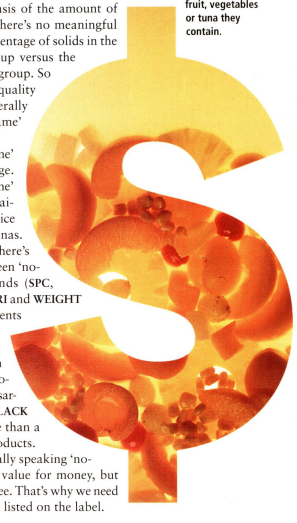
The canned food market can be divided into brand names (such as EDGELL and GOLDEN CIRCLE), 'house' brands (for example, FARMLAND, which is Coles' 'private' label) and 'no-names' (such as NO FRILLS, BLACK & GOLD and NO NAME).

The 'no-name' brands are cheaper to buy, and this generally follows through to their being better value for money on the basis of the amount of solid food they contain. There's no meaningful difference between the percentage of solids in the 'no-name' brands as a group versus the brand-name products as a group. So if you're happy with the quality when you try it, you'll generally save money on the 'no-name' brands of these foods.

Savings on some 'no-name' products can be quite large. For example, most 'no-name' tunas (imported from Thailand) are about half the price of big-brand Australian tunas. And with tinned peaches there's a big price difference between 'no-name' and some big brands (SPC, GOULBURN VALLEY, BERRI and WEIGHT WATCHERS) — about 16 cents per 100 g (or 68 cents for a 425 g can).

Asparagus spears are an exception to the rule — 'no-name' products aren't necessarily the cheapest. In fact, BLACK & GOLD is more expensive than a number of brand-name products.

The bottom line? Generally speaking 'no-name' products are better value for money, but that's a guide, not a guarantee. That's why we need the drained weight content listed on the label.



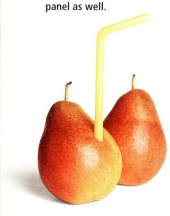
What does 'natural' juice mean?

The fruit we tested was canned in syrup (water and sugar), 'natural' juice, or water with artificial sweetener.

For pineapple the 'natural' juice is pineapple and for fruit salad it may be pineapple, pear juice or a mixture of juices. But while you might assume that peaches or apricots in 'natural' juice are also canned in their own juice, in fact you can almost guarantee that pear juice is used — because it's cheaper.

Some manufacturers list the presence of pear juice in the ingredients. We think they should all disclose the type of juice used.

When it comes to sugar content, artificially sweetened canned fruit contains the least (usually between 4% and 6%), with only the fruit contributing. Fruit canned in natural juice contains about 8% sugar (for pear juice) or about 10% (for pineapple juice), and fruit canned in syrup contains 12% on average. Fruit in 'heavy' syrup contains far more sugar — about 20%, but 'light' syrup will still give you about 12%. So don't just rely on claims to choose your tinned fruit — check the nutrient panel as well.



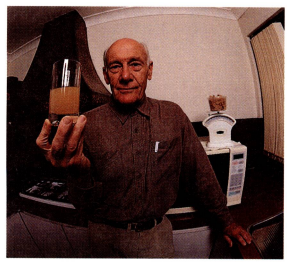
FEELING RIPPED-OFF?

James Costello, of Duncraig, WA, wrote to us suggesting we take a look at the drained weight of canned tuna after he noticed how little the net weight on a can actually tells you.

He purchased a can of tuna with a net weight of 425 g and noted that "many purchasers probably assume that means 425 g of fish". He weighed the tuna in the can and found it to be 315 g (that's 74% solids) — "less of a good buy than the label leads one to suppose" because "no one uses the brine, springwater or oil in a fish tin".

All this led James to thinking about what guidelines canners follow about the amount of actual food that goes into the can, and who checks on them.

As far as guidelines go, companies just follow their own internal specifications, which may or may not be based on existing international standards. And as James suspected, nobody checks up on them. Trade measurement (weights and measures) is controlled by various government authorities in different states and territories, and they are responsible for checking up on the 'net weight' of canned products (it's part of the trade measurements legislation), but neither they, nor anyone else, is responsible for checking the drained weight.



1 Stated net weight

This is the weight of the entire contents of the can, not including the weight of the can itself. Most of the brands we tested had an average measured weight slightly over the stated net weight, with some quite a bit over (30 g to 40 g). Only two brands were short by any significant amount (10 g for **ADMIRAL Young corn spears** and 23 g for **SAVINGS Pineapple pieces in natural juice**).

2 Representative price per can

This is based on prices found in our nationwide check in June 1997.

3 Highest/lowest price per can

This shows the highest and the lowest price we found in our nationwide check, and gives an idea of the quite large range of prices for canned food. For some brands there were big variations in price, be it from store to store or state to state, so it's worth shopping around if you buy canned food often.

4 Average % solids

We drained the contents of six cans of each brand of each food through a sieve to separate the solid from the liquid. We then weighed the amount of solid left and calculated it as a percentage of the weight of the solid and liquid together. The result listed is the average for the six cans.

5 Price per 100 g of solids

Once we'd determined the average amount of solids per brand, we calculated how much you'd pay for each 100 g of solids, based on the representative price. Assuming it's the solid content you're primarily interested in, this figure gives you an easy way to compare brands for price.

Any dodgy-looking products?

It was beyond the scope of this test to compare all the cans for taste, but we did look at the products closely as we drained them and noted any defects. And although we did find some less-than-desirable-looking products, in general the quality looked good.

More good news is that, in general, the 'no-name' brands didn't fare any worse than the big brand names for defects, so they're value for money from that point of view too.

Some of the 'surprises' we found included:

- Small white spots on asparagus spears (we found this defect in **CLARUS**, **EDGELL Crispy asparagus** and **GREENWOOD** brands): They're formed during canning by crystallisation of a natural compound in asparagus (called rutin). Some asparagus has more rutin than others, depending on its type or where it's grown, for example. It's not going to make you sick and the asparagus is still safe to eat, but of course the appearance can be off-putting. Sometimes these white spots can be mistaken for mould.
- Blackish/purple spots on asparagus (brands affected included **FARMLAND** and **TRIDENT** cuts, **RIDGEMONT**, **INTERNATIONAL PANTRY**, **FARMLAND** and **GROWERS** spears): Natural pigments in asparagus are responsible for these colours, which again only affect appearance.
- Black patches on beetroot (**NO NAME**, **BLACK & GOLD**, **FARMLAND** and **EDGELL Summer style**): These are due to a boron deficiency in the soil the beetroot is grown in. It's basically scar tissue and not a health hazard, but it does look unappealing.
- A tin of beetroot with very washed-out colour (**HOME BRAND**): In this case the manufacturer says it was early-season beetroot, which can sometimes be pale in colour. Another reason for pale beetroot can be overheating during processing.
- Very green peach slices (**BLACK & GOLD**): They appeared to be very under-ripe.
- Most canned tomatoes were in thin, watery juice, though a few brands — **EDGELL**, **LA GINA**, **TRIDENT** and **VAL VERDE** — had nice thick juice.

DRAINED WEIGHT OF CANNED FOOD

(Listed lowest to highest within categories, based on price per 100 g of solids.)

Brand	Type	Origin	1 Stated net weight (g)	2 Representative price per can ($)	3 Highest / lowest price per can ($)	4 Average % solids	5 Price per 100 g of solids ($)	
TUNA								
NO NAME	Chunky style in brine	Thailand	425	1.64	1.75 / 1.58	71	0.52	
NO FRILLS	Light meat chunk style in brine	Thailand	425	1.69	1.79 / 1.57	70	0.56	
BI-LO	Chunk style in brine	Thailand	425	1.78	1.96 / 1.69	70	0.59	
SAVINGS	In brine	Thailand	425	1.89	2.59 / 1.56	69	0.63	
BLACK & GOLD	In brine	Thailand	425	2.01	2.96 / 1.81	70	0.65	
HOME BRAND	Chunk style in brine, light meat	Thailand	425	1.97	2.69 / 1.69	66	0.68	
PREMIUM SELECTION	Light meat in brine, chunk style	Thailand	425	2.72	2.77 / 2.64	78	0.81	
TRIDENT	In spring water, salt-reduced	Thailand	425	3.13	3.34 / 2.93	82	0.87	
FARMLAND	Chunks in water, reduced salt	Thailand	425	2.85	3.69 / 2.45	75	0.88	
FARMLAND	Chunk in brine	Thailand	425	3.00	3.59 / 2.69	76	0.90	
PARAMOUNT	Yellowfin in brine	Thailand	425	2.75	3.25 / 1.99	68	0.91	
TRIDENT	In brine, premium-grade chunks	Thailand	425	3.24	3.69 / 3.18	79	0.92	
SEAKIST	Chunks in brine	Thailand	425	3.09	3.69 / 2.49	73	0.95	equal
SEAKIST	Chunks in spring water	Thailand	425	2.97	3.69 / 2.49	70	0.95	
SIRENA	In brine	Thailand	425	3.12	3.39 / 2.65	73	0.96	
SEAHAVEN	In brine	Australia	425	2.93	3.19 / 2.39	65	1.04	
JOHN WEST	In brine, chunk style	Australia	425	3.72	4.47 / 2.89	71	1.20	
GREENSEAS	Chunks in brine	Australia	425	3.68	4.35 / 3.35	69	1.23	equal
JOHN WEST	In spring water, reduced salt	Australia	425	3.79	4.47 / 3.48	70	1.23	
GREENSEAS	Chunks in spring water	Australia	425	3.72	4.35 / 3.35	65	1.34	
TOMATOES								
NO FRILLS	Whole, peeled	Australia	410	0.62	0.69 / 0.56	69	0.21	equal
BI-LO	Whole, peeled	Thailand	410	0.53	0.65 / 0.48	59	0.21	
NO NAME	Whole	Thailand	400	0.62	0.65 / 0.56	59	0.25	
SOUTHERN CROSS	Whole, peeled	Australia	415	0.76	0.88 / 0.69	66	0.26	equal
ADMIRAL	Whole, peeled	Thailand	410	0.74	0.87 / 0.63	68	0.26	
VAL VERDE	Whole, peeled	Italy	400	0.81	1.00 / 0.67	71	0.28	
HOME BRAND	Whole, peeled	Greece / Thailand	400	0.63	0.79 / 0.49	53	0.28	equal
GOULBURN	Whole, peeled	Australia	425	0.79	0.96 / 0.69	65	0.28	
EDGELL	Whole, peeled	Australia	400	0.88	1.15 / 0.67	68	0.29	equal
EDGELL	Whole, peeled, no added salt	Australia	400	0.88	1.09 / 0.67	71	0.29	
SAVINGS	Whole, peeled	Thailand	400	0.64	0.79 / 0.49	52	0.30	equal
BLACK & GOLD	Whole, peeled	Thailand	400	0.72	0.81 / 0.63	56	0.30	
SPC	Whole, Australian	Australia	415	0.98	1.16 / 0.75	75	0.30	
ARDMONA	Whole, peeled	Australia	425	0.93	1.17 / 0.69	69	0.31	
LETONA	Whole, peeled	Australia	425	0.91	1.15 / 0.79	65	0.32	equal
FARMLAND	Whole, peeled, no added salt	Australia	410	0.89	0.99 / 0.85	64	0.32	
SPC	Whole, Roma	Australia	415	1.02	1.15 / 0.89	66	0.36	
LA GINA	Whole, peeled	Italy	400	1.08	1.25 / 0.89	70	0.38	equal
TRIDENT	Whole, peeled, Roma-style	Italy	400	0.92	0.99 / 0.89	61	0.38	
FRUIT SALAD								
NO NAME	In light syrup	Australia	825	1.63	1.63 / 1.63	64	0.30	
NO FRILLS	In light syrup	Australia	825	1.69	1.78 / 1.58	63	0.31	
SAVINGS	In syrup	Australia	825	1.69	1.89 / 1.54	62	0.32	
GOLDEN CIRCLE	Tropical, in natural juice	Australia	440	1.19	1.34 / 1.06	74	0.35	equal
SOUTHERN CROSS	In natural juice	Australia	825	1.86	2.09 / 1.54	63	0.35	
GOLDEN CIRCLE	Tropical, in syrup	Australia	450	1.20	1.34 / 1.06	70	0.36	
FARMLAND	In light syrup	Australia	825	2.14	2.70 / 1.99	65	0.40	equal
ARDMONA	In natural juice, no added sugar	Australia	825	2.10	3.25 / 1.59	63	0.40	
SPC	Tropical, in natural juice, no added sugar	Australia	415	1.52	1.69 / 1.39	74	0.47	
FARMLAND	In natural juice, no added sugar	Australia	415	1.47	1.62 / 1.35	71	0.48	
WEIGHT WATCHERS	With pawpaw, in water with artificial sweetener	Australia	410	1.62	1.84 / 1.47	73	0.53	equal
SPC	In light syrup	Australia	415	1.54	1.69 / 1.42	64	0.53	
BERRI	Tropical	Australia	400	1.71	1.79 / 1.23	71	0.55	equal
GOULBURN VALLEY	In natural fruit juice, no added sugar	Australia	425	1.64	2.52 / 1.39	68	0.55	
WEIGHT WATCHERS	In water with artificial sweetener	Australia	420	1.67	1.84 / 1.47	68	0.58	

Where can you buy the 'no names'?

- **Bi-Lo:** Bi-Lo.
- **Black & Gold:** Independents (for example, small local supermarkets such as Clancys, Riteway, Festival, Tigerbarn).
- **Farmland:** Bi-Lo, Coles, Newmart.
- **Home Brand:** Woolworths, Safeway, Purity, Roelf Voss.
- **Jewel:** Jewel.
- **No Frills:** Franklins.
- **No Name:** Jewel.
- **Savings:** Coles, Pick 'n' Pay, Newmart.

Drained weight of canned food, continued

Brand	Type	Origin	1 Stated net weight (g)	2 Representative price per can ($)	3 Highest / lowest price per can ($)	4 Average % solids	5 Price per 100 g of solids ($)	
PINEAPPLE								
SAVINGS	Pieces in natural juice	Thailand	850	1.37	1.79 / 0.80	66	0.25	
JEWEL	Pieces in syrup	Australia	440	0.79	0.79 / 0.79	64	0.27	equ
NO NAME	Pieces in syrup	Australia	850	1.41	1.44 / 1.38	61	0.27	
BI-LO	Pieces in natural juice	Thailand	425	0.76	0.80 / 0.67	59	0.28	
JEWEL	Pieces in natural juice	Australia	440	0.79	0.79 / 0.79	61	0.29	equ
NO FRILLS	Pieces in natural juice	Australia	440	0.84	0.91 / 0.74	63	0.29	
FARMLAND	Pieces in natural juice, no added sugar	Australia	440	0.91	1.90 / 0.79	61	0.33	
HOME BRAND	Pieces in natural juice	Australia	440	0.96	1.50 / 0.75	61	0.35	
GOLDEN CIRCLE	Pieces in syrup	Australia	450	1.04	1.18 / 0.82	62	0.36	equ
GOLDEN CIRCLE	Pieces in natural juice	Australia	440	1.05	1.18 / 0.82	63	0.36	
PEACHES								
BI-LO	Halves in syrup	Australia	825	1.43	1.55 / 1.35	64	0.26	
NO NAME	Halves in light syrup	Australia	425	0.90	0.90 / 0.89	65	0.31	
NO FRILLS	Halves in light syrup	Australia	425	0.93	0.96 / 0.76	65	0.32	
ARDMONA	Halves in natural juice, no added sugar	Australia	825	2.13	2.41 / 1.79	66	0.39	
GOULBURN VALLEY Gold	Halves in natural juice, no added sugar	Australia	425	1.65	1.78 / 1.51	71	0.52	
GOULBURN VALLEY	Halves in natural fruit juice, no added sugar	Australia	425	1.62	1.78 / 1.39	68	0.54	
SOUTHERN CROSS	Slices in light syrup	Australia	825	1.55	2.09 / 1.39	65	0.28	
SOUTHERN CROSS	Slices in natural juice	Australia	825	1.82	2.09 / 1.54	71	0.31	
SAVINGS	Slices in syrup	Australia	825	1.58	1.89 / 0.99	60	0.31	equ
NO FRILLS	Slices in light syrup	Australia	425	0.93	0.96 / 0.75	66	0.31	
BLACK & GOLD	Slices in syrup	China	800	1.74	1.85 / 1.66	67	0.32	
HOME BRAND	Slices in light syrup	Australia	425	0.99	1.65 / 0.76	64	0.35	
ARDMONA	Slices in light syrup	Australia	825	2.12	2.41 / 1.66	66	0.38	
ARDMONA	Slices in natural juice, no added sugar	Australia	825	2.14	2.41 / 1.66	62	0.40	
FARMLAND	Slices in natural juice, no added sugar	Australia	415	1.34	1.56 / 0.91	76	0.42	equ
LETONA	Slices in natural juice, no added sugar	Australia	415	1.38	1.44 / 1.35	75	0.42	
SPC	Slices in light syrup	Australia	415	1.58	2.18 / 1.39	77	0.48	
SPC	Slices in natural juice, no added sugar	Australia	415	1.54	2.18 / 1.41	67	0.53	
GOULBURN VALLEY	Slices in natural fruit juice	Australia	425	1.63	1.78 / 1.39	68	0.54	
GOULBURN VALLEY Gold	Slices in natural juice, no added sugar	Australia	425	1.65	1.78 / 1.29	67	0.54	equ
WEIGHT WATCHERS	Slices with artificial sweetener	Australia	420	1.65	1.87 / 1.47	69	0.55	
BERRI	Slices	Australia	400	1.68	1.79 / 1.49	69	0.57	
CORN								
BLACK & GOLD	Kernels	New Zealand (A)	440	0.68	1.05 / 0.59	66	0.23	
SAVINGS	Kernels	Australia	440	0.70	0.95 / 0.54	62	0.25	
BI-LO	Kernels	Australia	420	0.66	0.71 / 0.56	61	0.25	equ
NO FRILLS	Kernels	Australia	420	0.69	0.69 / 0.69	60	0.27	
NO NAME	Kernels	Australia (B)	420	0.69	0.69 / 0.69	59	0.28	
GOLDEN CIRCLE	Kernels	Australia	440	0.96	1.20 / 0.89	72	0.29	
MOUNTAIN MAID	Niblets	Australia	440	0.87	0.98 / 0.82	67	0.30	
SPC	Kernels	Australia	440	0.86	1.07 / 0.78	62	0.31	
FARMLAND	Kernels	Australia	420	0.88	1.50 / 0.69	66	0.31	equ
SAVINGS	Young-cut kernels	Thailand	425	0.79	0.85 / 0.69	58	0.31	
FARMLAND	Kernels, no added salt	Australia	420	0.89	1.05 / 0.79	65	0.32	
EDGELL	Kernels	Australia	420	0.98	1.16 / 0.85	69	0.33	equ
NO FRILLS	Young-cut kernels	Thailand	425	0.78	0.78 / 0.78	57	0.33	
EDGELL	Kernels, no added salt	Australia	420	0.98	1.16 / 0.85	67	0.34	
FARMLAND	Young-cut kernels	Thailand	425	0.90	1.05 / 0.69	55	0.36	
TRIDENT	Young-cut kernels	Thailand	425	1.00	1.15 / 0.88	57	0.40	
BEETROOT								
NO NAME	Sliced	Australia	425	0.56	0.59 / 0.53	70	0.18	
SAVINGS	Sliced	Australia	450	0.56	0.61 / 0.54	70	0.18	
BI-LO	Sliced	Australia	450	0.55	0.61 / 0.53	68	0.18	equ
NO FRILLS	Sliced	Australia	425	0.55	0.58 / 0.52	66	0.18	

(A) This product will in future be sourced in Australia.

(B) There will be a new supplier in future.

Brand	Type	Origin	1 Stated net weight (g)	2 Representative price per can ($)	3 Highest / lowest price per can ($)	4 Average % solids	5 Price per 100 g of solids ($)	
BEETROOT, continued								
BLACK & GOLD	Sliced	Australia	425	0.56	1.00 / 0.52	65	0.20	
HOME BRAND	Sliced	Australia	425	0.61	0.80 / 0.54	65	0.21	
FARMLAND	Sliced	Australia	425	0.72	0.87 / 0.64	71	0.23	
FARMLAND	Sliced, no added salt	Australia	425	0.73	0.87 / 0.65	68	0.24	
GOLDEN CIRCLE	Sliced	Australia	450	0.83	0.94 / 0.74	71	0.25	
EDGELL	Sliced	Australia	425	0.79	0.93 / 0.62	63	0.28	equal
EDGELL	Sliced, 'summer style'	Australia	425	0.80	0.93 / 0.62	63	0.28	
ASPARAGUS								
NO FRILLS	Green cuts	New Zealand	340	1.01	1.29 / 0.84	72	0.39	equal
BI-LO	Green cuts	New Zealand	340	0.88	0.99 / 0.83	61	0.39	
NO NAME	Green cuts	China	340	0.91	0.97 / 0.85	61	0.41	
BLACK & GOLD	Cuts	Not stated	340	1.07	1.50 / 0.89	60	0.49	
FARMLAND	Green cuts	New Zealand	340	1.50	2.59 / 1.39	64	0.65	
TRIDENT	Green cuts	New Zealand	340	1.46	1.82 / 1.17	63	0.65	
SPC	Cuts	Australia	340	1.77	1.81 / 1.74	60	0.85	
HOME BRAND	Cuts with tips	Australia	420	1.60	1.69 / 1.40	64	0.57	
MOUNTAIN MAID	Cuts and tips	Australia	340	1.62	1.97 / 1.29	61	0.75	
COWRA GOLD	Cuts with tips	Australia	420	2.26	2.88 / 1.58	65	0.78	
EDGELL	Green cuts and tips	Canada	340	1.84	2.17 / 1.77	61	0.86	
JOHN WEST	Green cuts and tips	USA	340	1.87	2.17 / 1.74	60	0.88	
JOHN WEST	Cuts and tips, salt-reduced	USA	340	1.89	2.17 / 1.74	57	0.95	
NARCISSUS	White spears	China	430	1.90	1.9 / 1.90	66	0.66	
GREENWOOD	Green spears	China	425	1.79	1.79 / 1.79	61	0.68	
HOME BRAND	Green spears	China	425	2.01	2.3 / 1.67	61	0.76	
NO NAME	Spears	China	340	1.73	1.97 / 1.49	61	0.79	
RIDGEMONT	Spears in brine	New Zealand	340	1.79	1.79 / 1.79	58	0.86	
COWRA GOLD	White spears with green tips	Australia	420	2.77	2.88 / 2.49	67	0.92	
SAVINGS	Green spears	China	340	1.95	1.99 / 1.88	58	0.94	
BI-LO	Green spears	China	340	1.99	1.99 / 0.85	57	0.98	
NO FRILLS	Green spears	New Zealand	340	2.04	2.18 / 1.93	57	1.00	equal
INTERNATIONAL PANTRY	Green spears	China	340	2.22	2.25 / 2.15	63	1.00	
EDGELL	Green spears	Australia	425	2.83	4.17 / 2.73	64	1.01	
FARMLAND	Green spears, no added salt	New Zealand	340	2.59	2.99 / 1.39	67	1.06	
BLACK & GOLD	Spears	China	340	2.37	2.95 / 2.15	61	1.08	
FARMLAND	Green spears	New Zealand	340	2.59	2.99 / 1.39	61	1.16	
GROWERS	Green spears in spring water	New Zealand	340	2.53	2.99 / 2.45	58	1.18	
TRIDENT	Green spears	New Zealand	340	2.82	3.29 / 2.72	61	1.25	
EDGELL	Classic white spears	Australia	440	4.03	4.29 / 3.89	71	1.26	
JOHN WEST	Green spears	USA	340	3.05	3.65 / 2.75	61	1.43	
EDGELL	Crisp green spears	Australia	340	3.17	3.55 / 2.84	60	1.51	
MOUNTAIN MAID	Spears	Australia	340	2.78	3.29 / 2.39	52	1.53	
CLARUS	Spears in natural spring water	New Zealand	340	3.08	3.40 / 2.89	58	1.55	
APRICOTS								
NO NAME	Halves in light syrup	Australia	825	1.63	1.63 / 1.63	61	0.31	
HOME BRAND	Halves in light syrup	Australia	415	0.99	0.99 / 0.99	66	0.35	
PRESIDENT	Halves in light syrup	New Zealand	425	1.02	1.05 / 0.98	60	0.38	
BLACK & GOLD	Halves in syrup	China	820	2.10	2.11 / 2.09	63	0.40	
FARMLAND	Halves in natural juice, no added sugar	Australia	415	1.48	1.74 / 1.35	66	0.53	
LETONA	Halves in natural juice, no added sugar	Australia	415	1.52	2.10 / 1.49	61	0.58	
SPC	Halves in light syrup	Australia	415	1.60	1.92 / 1.39	64	0.59	equal
SPC	Halves in natural juice, no added sugar	Australia	415	1.56	1.92 / 1.15	62	0.59	
GOULBURN VALLEY	Halves in natural fruit juice, no added sugar	Australia	425	1.66	1.94 / 1.50	60	0.61	
GOULBURN VALLEY Gold	Halves in natural juice, no added sugar	Australia	425	1.64	1.87 / 1.29	56	0.65	
BERRI	Halves	Australia	400	1.72	1.79 / 1.55	57	0.69	
WEIGHT WATCHERS	Halves in artificial sweetener	Australia	420	1.75	1.89 / 1.56	56	0.72	

GST — What's in it

The Federal Government is keen to see a goods and services tax introduced in Australia. What is a GST? And how is it different this time from Dr Hewson's *Fightback*?

IN BRIEF

- Older and poorer people are likely to be worse off with the combination of a GST and cuts in income tax, high-income households better off. Unless you compensate a large number of Australians for the extra tax burden they will carry, it's unfair to impose a GST.
- Any GST proposal needs to be considered in the context of the whole tax system: it's not the Lone Ranger coming to rescue Australia from its economic woes.

"WHAT'S IN IT FOR ME?" THIS IS the bottom line for consumers, faced as we are with a united push by leading business and industry associations and the Federal Government for a substantial change to the way we are taxed *as consumers*.

This article will run through the basics of a GST so you can follow the debate.

How it works now

There are two main ways of raising taxation revenue:

- Direct: this means income tax, including capital gains and fringe benefit taxes.
- Indirect: this means taxing consumption — goods and services that you buy. A GST is an indirect tax.

Our current indirect taxation is carried out by the federal, state and territory governments. The Commonwealth raises what is called a wholesale sales tax (WST) on products like your television set and video, musical instruments, computers, petrol and other fuels.

In state hands, until recently, indirect taxes focused on goods such as petrol (again) and diesel, tobacco and alcohol. In August 1997, the High Court ruled that these state taxes (known as 'franchise fees') were invalid. Now the Commonwealth is collecting the tax for the states and passing the revenue over.

Some goods and many services are currently tax-free, including books, most foods, magazines (like the one you're reading now), clothing, education and much more.

The anatomy of GST

Q: What is a GST?

A: As a tax on goods and services, a 'broad-based' GST would place a tax on most things we buy, including these *products*:

- Clothes, books, food, insurance, building materials, cars, toys.

And on *services* such as:

- The plumber's bill, hairdressing, car repairs, retirement planning, entertainment, holidays.

Q: How is it paid?

A: GST will be included in the price you pay for goods and services.

Q: Who pays?

A: Although businesses and consumers all pay the tax when they buy things, businesses get a credit or rebate for the tax. In the end it's only the consumer who pays.

Q: Who else has a GST?

A: Nearly every developed country in the world: for example, Canada, Japan and the UK. One big exception is the US, although its indirect taxation system is closer to a GST than to our WST. Australia is the only developed nation which relies principally on a wholesale sales tax for taxing goods.

Why might we need a GST?

Here are some of the main arguments for a GST.

- **Problems with indirect taxes.** As a proportion of household income, spending on many of the goods we tax is in decline — including beer, cars, tobacco and 'durables' such as household appliances. We're also lowering taxes on imports such as clothing and cars. But...
- **...Australia needs to protect its tax revenue** — to help pay pensions for an aging population and to provide the social services and public goods (such as schools and roads) we demand. A GST will capture and tax consumption from growth areas, such as services and sales on the Internet.

for me?

■ **To clean up messy state taxes** and provide the states with a **more stable revenue base** out of the Commonwealth purse. The states are being squeezed: they have limited options for raising revenue, but the Commonwealth expects them to take responsibility for more services.

■ **To improve our international competitiveness.** An amount of wholesale tax remains embedded in the cost of our exports, making them more expensive.

Problems with a GST

■ **A GST is regressive** — which means it hits people with a lower income harder than the wealthy because they have to spend a higher proportion of their income on the goods and services. According to the Australian Council of Social Service (ACOSS), in 1994 the poorest 10% of households paid 22.6% of their income in indirect taxes, while the top 10% paid 5.7%.

Unless you compensate a large number of Australians for the extra tax burden they will carry, it is unfair to impose a GST. And the problem with compensation packages is that they need to be ongoing, and are vulnerable to political attack.

■ **Increased administration costs.** Around 75,000 businesses have to prepare monthly or quarterly sales tax returns now. Under a GST an estimated one million or more taxpayers will have to lodge GST returns. And there will be significant business costs in shifting to a GST system (although much of this will only affect the first year or so).

■ **Will businesses always pass on lower prices?** Consumers will need to watch out that businesses pass

Who will be better off ... or worse off?

Calculations done for CHOICE help identify winners and losers out of tax reform based on a GST. We tested a number of GST rates and scenarios, and the inequities get worse if you include substantial income tax cuts as part of the deal.

■ An average couple aged 65 or over will pay **18% to 20% more tax** under a GST that replaces current WST and comes with a 20% income tax cut.

■ An average one-parent household with dependent children will be **worse off** by nearly $4 a week where a GST merely replaces the WST. That rises to a loss of $15 per week if there are no exemptions from the tax and there is a 20% income tax cut.

■ High-income households are barely affected by a GST, but pay **10% less tax overall** if you include a 20% income tax cut.

■ An average couple with kids is **fairly unaffected** by it all, whether there are exemptions or not, and even a 20% income tax cut doesn't help much. This suggests that real reform which delivers benefits to Middle Australia will require more than a narrow GST and an income tax trade-off.

What will cost more or less?

The Federal Treasurer, Peter Costello, has been reported as suggesting that a possible GST rate of 15% would be necessary to deliver real benefits. Barring specific GST exemptions, which goods and services might be cheaper or dearer than they are now?

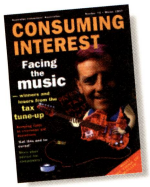
You'll pay LESS for ...

- A car.
- A computer.
- Jewellery and watches.
- Your TV, video and hifi.
- Beer, wine and spirits.
- Petrol.

But you'll pay MORE for ...

- Food and clothing.
- Your holidays.
- Going to the movies.
- Home maintenance — the electrician, plumber, builder, etc.
- A haircut.
- Books and magazines.
- Private school fees and tutoring.
- Insurance.
- A new fridge, stove, washing machine.

SO, WE'LL ACTUALLY PAY LESS FOR CARS AND COMPUTERS?
THAT'S RIGHT, LADDIE
IF YOU CAN STILL AFFORD THEM AFTER BEING TAXED ON EVERYTHING ELSE



Want to know more?

The Consumers' Association has prepared a substantial investigation into tax reform, including modelling potential GST scenarios. It can be found in the Winter 1997 edition of *Consuming Interest* magazine — see the order form on page 42.

You can also find out more about GST by looking at CHOICE's Web site: www.sofcom.com.au/ACA/, which also provides links to other relevant sites.

on lower prices where taxes have been removed or reduced. In particular, industries which are not very competitive by nature — such as the petrol industry — must be monitored.

What's different this time?

One of the reasons for the failure of *Fightback!* (1992-93) was that it tried to do too many things at once.

Not only was it a tax revolution, but Medicare was to be put to the torch, there would be huge cuts in government expenditure (around $4 billion worth), while state payroll taxes would go and petrol excise would be cut.

And yet, for all this pain, the average worker was only likely to receive an income tax cut of something like $8 per week. You can be sure the sales pitch will not be as overblown this time around.

What might a GST look like?

Our modelling suggests it would take a GST of 4.5% merely to replace existing wholesale sales tax; add some exemptions for food, clothing, housing, fuel and health expenditure, and the GST rate hits 8.7%; include, say, a 20% income tax cut, and you'd need a GST of 16.3%. Add in any cuts to fuel excise and payroll tax and you're soon above 20%.

Other issues include:

■ **Single rate or multiple rate?**

The UK, Japan and New Zealand, for example, impose a single rate of GST for most goods and services. Belgium (like some other countries) takes a different approach: there are four rates (from 1% to 20.5%), while some things are zero-rated.

A single rate is neat but might place too heavy a burden on some industries. Multiple rates are more flexible but messier and can create discrepancies between similar products and services.

■ **Single-stage or multi-stage?**

The tax can be imposed just once — on the final sale — or at each stage of production, distribution and retail. This latter option is like the UK's VAT (Value-Added Tax), where tax is raised on each incremental increase in value up to and including the sale to the consumer.

A multi-stage tax like this covers more people and makes it harder to avoid the tax; but a single-stage GST saves all the messing around with tax credits and administration.

■ **Will there be exemptions?**

Many countries specifically exclude some of the most common goods and services, such as food and clothing, from their GST. Exclusions like this make a GST fairer but they weaken the effectiveness of the tax. If you take out food and clothing you leave a revenue hole. This means the rate of GST must be higher.

GST myths

As the debate progresses, watch out for these red herrings:

■ **"A GST will catch the black economy."**

Fightback! estimated the size of Australia's black economy — those dealing in cash and not declaring this revenue in their income tax returns — as worth between 5% and 15% of gross domestic product each year. But there's great uncertainty about all this, and *Fightback!* itself chose to proceed on the basis of the lower figure. The experts are not confident a GST would catch a significant level of revenue from those who want to avoid it.

■ **"A GST will reduce unemployment."**

A GST has little to do with curing unemployment — economic growth is what creates jobs.

■ **"Once it's in, the rate of GST will rise."**

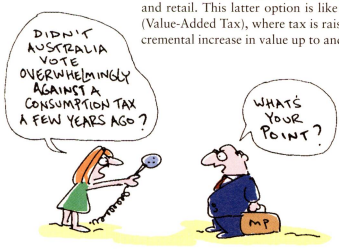
That's probably true. New Zealand's GST has gone from 10% (in 1986) to 12.5%; the UK's VAT lifted from 15% to 17.5% after nearly 20 years; Japan's rate has just gone from 3% to 5%.

But rising rates are also a fact of life under the current system of indirect taxation. Back in the early 1960s the three main sales tax rates were 2.5%, 15% and 25%. Now they're 12%, 22% and 32% (with 45% for luxury motor vehicles and 26% for wine). Rate rise is not a problem solely with a GST.

The big picture

CHOICE isn't opposed to a GST in principle; it's potentially part of the tax toolkit. But the GST is not the Lone Ranger coming to rescue Australia from its economic woes — the GST never rides alone. The Commonwealth Government has to consider any GST proposal in the context of income taxes, asset taxes, state taxes and the welfare system, including how to compensate those likely to lose out from a GST. We'd like to see a fairer and less complex tax system come out of any tax reform.

Once a real proposal is on the tax table we'll bring you another report on its potential impact on consumers. ❑



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Gift recipient details:

Mr/Mrs/Miss/Ms .....

Address .....

..... Postcode .....

Gift card to read: .....

To ..... From .....

Send gift renewal notice to me ❑ Yes ❑ No

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Answers to your health questions ...

The CHOICE *Health Reader* brings you the latest findings on nutrition, exercise and all branches of medicine and health care. Based on research in up to 200 respected international scientific journals, the *Health Reader* is published in a reader-friendly newsletter format.

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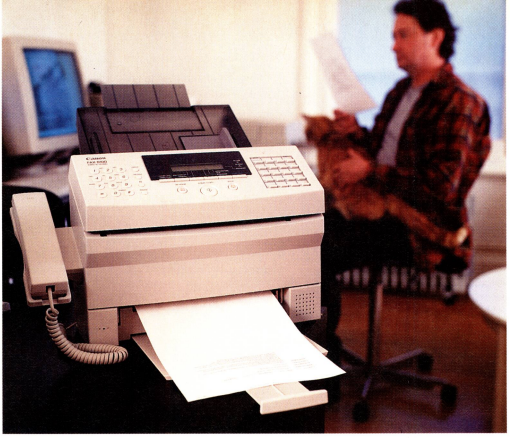
The CHOICE *Health Reader* costs $50 (personal) or $72 (professional/institution) a year for 10 issues.

- What causes sick-athlete syndrome?
- What's the relationship between pollution and coronary disease?
- Why do we like salt so much?
- HRT — does it cause weight gain in menopause?
- Which are the safest playground surfaces?
- Blankets or doonas — which are healthier?
- Why might green tea protect against cancer?

The plain-paper models in this test are packed with functions and features that may be overkill for the average person, but ideal for your small or home office.



Fax *and* figures

WHEN WE LAST TESTED FAX machines (CHOICE, August 1995), we paid around $1000 for thermal-paper models. Only two years later, you can get a plain-paper fax machine for considerably less money — the models in our *What to buy* list start from as low as $650.

All the models tested come with a fax/phone switch, which means you can simply plug them into your phone line and receive both calls and faxes — the fax machine will work out which type of call is coming through, and can also redirect a call to an answering machine if you have one connected.

The **OLIVETTI OFX 1200** was special in several regards: it's the only model in the test that doesn't have a handset (so you'll need to connect an external phone to make and receive phone calls), but the only one with a built-in answering machine — however, one you may find difficult to use (see *Problems*, page 46, for details).

The overall scores for quality and speed of sending and receiving normal faxes show only relatively small differences between the models tested. What differentiates the fax machines in our test from each other is mainly the quality of sent and received pictures and their ease of use.

If you decide a plain-paper model is for you (see *Do you need a plain-paper fax machine?*, page 45), you'll face a confusing array of features and functions that may seem something of an overkill for the average person, but that makes them suitable for use in small and home offices.

An operating manual with a detailed index and/or table of contents, easy-to-understand instructions and intuitive procedures for the most common functions and tasks are essential, if you want to be able to use what these machines have to offer.

WHAT TO BUY

SAMSUNG SF 4000 (for digital exchanges only)	$899
CANON FAX-B100	$899
BROTHER FAX-1020 BEST BUY	$649
PANASONIC KX-F1000AL	$799

equal

Brother tells us it has just reduced the normal selling price to $599.

On performance alone, the **OLIVETTI** would have been included in the *What to buy* list too. However, due to the various difficulties we had with this model (see *Problems* for details), we don't think it's a good choice.

IN BRIEF

- The main differences between the models on test were their ease of use and the quality of sending and receiving pictures.
- Due to the various problems we had with the Olivetti OFX 1200, we don't think it's a good choice if you're shopping for a fax machine (see *Problems*, page 46).
- The Samsung SF 4000 had difficulty connecting to our analogue phone exchange and had to be serviced before it would work properly. We recommend you only buy it if you're connected to a digital phone exchange (see *Problems* for how to find out).

PROFILES

Models in the *What to buy* list are profiled in rank order. The prices shown are a good target to aim for when shopping around, based on nationwide checks in May/June 1997. Anything lower is a bargain.

Print type — inkjet vs print ribbon

Three of the fax machines tested (the CANON, OLIVETTI and SAMSUNG) print with an ink jet or 'bubble jet' — a technology you may know from computer printers and that's usually relatively cheap: a printed page can cost you around five cents, depending on what you print. Ink cartridges are very easy to replace.

The BROTHER, PANASONIC, SAGEM and SHARP use a print ribbon or film as wide as a piece of A4 paper. The ribbon is coated with a wax and ink mixture that's transferred to the paper by heating the appropriate areas.

The ribbon is wound through at the same pace as the paper it's printing on — it doesn't skip over white spaces — and it can't be reused. So if there are large blank sections on the incoming fax, the ribbon is still wound on — and wasted.

Due to this waste and the replacement cost of ribbon cartridges, each printed page may cost you more than on inkjet machines.

There may also be a security problem with old ribbons. As the ink is transferred from the ribbon to the paper letter by letter, you can read the printed faxes on the ribbon. While this probably won't bother most private users, it may be a security problem if you use such a machine for your home office.

We also found the print ribbons much more fiddly to replace than ink cartridges.

SAMSUNG SF 4000

We recommend you only buy the **SAMSUNG** if you're connected to a digital phone exchange (see *Problems*, page 46, for details on how to find out).

Price: $899

Good points

- Best text quality.
- Easiest to use.
- Very good instruction manual with good table of contents.
- Prints with an ink jet (see *Print type — inkjet vs print ribbon*, left).
- Can make and receive phone calls when there's a power cut.

Bad points

- Poorest overall picture quality.
- Relatively expensive.
- May not work properly when connected to an analogue phone exchange.

BROTHER FAX-1020

Price: $649*

BEST BUY

Good points

- Fast at sending pictures.
- PC connection available (an extra $199).

Bad points

- Relatively slow at receiving pictures.
- Uses a print ribbon.

* But Brother tells us it has just reduced the normal selling price to $599.

CANON FAX-B100

Price: $899

Good points

- Best pick if you send and receive a lot of pictures.
- Good instructions with very good index and table of contents.
- Prints with a 'bubble jet'.
- Will switch to an energy-saver mode if not used for a certain time.
- Gives a choice of 11 European languages for display and reports.

Bad points

- When storing one-touch-dial phone numbers, you need to use cursor keys to access the next available location.
- Relatively expensive.
- The only model that can't be polled (see *Features they all have*, page 46).

PANASONIC KX-F1000AL

Price: $799

Good points

- Good quality of pictures sent.
- Good instructions and index/table of contents.
- Can be used as a hands-free speakerphone.

Bad points

- Quality of received text not as good as with the other models in the *What to buy* list.
- Uses a print ribbon.

Your fax options

If you need to send or receive faxes only occasionally, there may be cheaper options open to you than buying your own fax machine:

■ **Use a public fax**

You can send faxes from nearly all post offices via 'FaxPost' — even to people who don't have a fax machine. In this case, Australia Post sends the fax to the nearest post office, where it can be picked up by or forwarded to the recipient (free of charge by normal mail, or for an additional fee by courier). The costs for this service are $4 for the first page, and $1 for each subsequent page.

Some newsagencies and computer shops also offer fax services.

■ **Use a computer fax modem**

If you already have a computer, buying a modem plus the necessary fax software may be cheaper than most fax machines.

It'll allow you to connect your computer to your phone line and send and receive faxes. However, if you don't have a scanner, you can only fax documents generated by your computer. And with most modems, if you want to be able to receive faxes at all times, your computer will have to be left switched on (although there are some modern, more expensive modems on the market that can receive faxes with your computer switched off).

Do you need a plain-paper fax machine?

Thermal-paper fax machines are cheaper to buy than plain-paper ones. They print by using heat to change the colour of the special paper — so you don't have to replace toner, ink or ribbons. However, thermal-paper faxes tend to fade over time, and scratches and folds will also become black or brown, making the document harder to read. So if you need to keep your faxes for a long period of time, you'll have to copy the thermal-paper documents onto plain paper for filing — or buy a plain-paper fax machine.

Another advantage of some plain-paper models is that you can connect them to your computer and use them as a printer and — in some cases — even a scanner (see table column 4, page 47).

What to consider when buying

Check *Features they all have* on page 46 and the table to identify which features you think are important for you. In addition, there are some general things to consider when buying:

■ In the shop, ask whether you can try out the fax machine you're interested in by copying a document (ideally with both text and a picture).

■ Look for a model that allows you to make phone calls during a power failure, or make sure you install a separate phone. Otherwise you may be left without phone connection in an emergency.

■ If you expect to use a plain-paper fax machine a fair bit (for example, if you plan to use it also as a computer printer), look for an inkjet model — they can be cheaper to run than models with a print ribbon (see *Print type*, far left).

■ Look for a model with a phone helpline or customer service, in case you run into problems when setting up or using the fax machine.

Receiving a fax can be more expensive if your machine uses a print ribbon instead of an inkjet, especially if you mainly print ordinary text pages.

Troubleshooting

Getting help

If you think your fax machine isn't working correctly, you're not sure if you've set it up properly or you can't get it to work with your phone and/or answering machine, check whether the manufacturer has a helpline or customer service section you can call (see the table overleaf).

You can also use 'TestFax Plus', a computerised fax-diagnostic service offered by Telstra. It'll check whether the main functions of your fax machine are working properly. You fax a one-page document to 1300 368 999, and within a few minutes you'll receive a report informing you how your machine performed in a series of tests. It'll also recommend any further action you should take, if applicable. You could also fax the results to the manufacturer's customer service department to aid them in solving your problems.

The service will cost you 25 cents from anywhere in Australia, unless your fax machine is connected to a mobile phone (then normal mobile phone charges will apply).

Answering machine problems

Only one model in our test (the **OLIVETTI**) comes with a built-in answering machine. The other models provide a connection for an external answering machine.

Apart from the extra space you'll need for an additional appliance, 'communication' problems between fax machines and external answering machines aren't uncommon.

There are several options if you face such problems:

■ Connect to 'Duet', a service offered by Telstra, if both your phone exchange and fax machine are compatible with it. You'll get two different numbers for your one phone line. One is only recognised by your fax machine, the other only by your phone/answering machine. The numbers also have different ring tones, so you can distinguish between fax and phone calls. However, you still only have one line, so you can't use both the phone and the fax machine at the same time. The service costs $4 per month.

■ Get a separate phone line with a separate number for your fax machine, which will cost you a $173 installation fee plus $11.65 per month. The advantage: you'll be able to use both phone and fax machine at the same time.

■ Buy a three-in-one machine (telephone, fax, answering machine).

Call-waiting problems

If you have only one phone line, some optional services provided by Telstra may cause problems. For example, the 'call waiting' signals of a call coming in while you're sending or receiving a fax may interfere with the fax connection — you may lose parts of the document.

To avoid this problem, at least when *sending* a fax, you can switch off call waiting by dialling #43#. You can switch it on again by dialling *43# after sending the fax.

PLAIN-PAPER FAX MACHINES

Brand / model (in rank order)	Manufacturer / distributor	Origin	Target price ($)*	Warranty (years)	Dimensions (WxDxH; mm)	Handset / answering machine	Document feeder / blank sheet storage capacity	Number of one-touch / speed-dial spots	R
SAMSUNG SF 4000 **(A)**	Samsung	Korea	899	1	465 x 560 x 360	✓ / -	30 / 100	20 / 50	1.
CANON FAX-B100	Canon	Japan	899 **(F)**	1	440 x 570 x 330	✓ / -	20 / 100	20 / 50	1
BROTHER FAX-1020	Brother	Japan	649 **(D)**	1	390 x 480 x 460	✓ / -	20 / 200	12 / 48	0.
PANASONIC KX-F1000AL	Panasonic	China	799	1	440 x 535 x 285	✓ / -	15 / 250	14 / 60	0.
OLIVETTI OFX 1200 **(B)**	JTC International	Thailand	1099 **(E)**	1	325 x 550 x 300	- / ✓	10 / 70	10 / 32	1
SAGEM Phonefax 311 **(C)**	Sagem	France	699	1	290 x 370 x 290 **(G)**	✓ / -	10 / 30	0 / 40	0.
SHARP FO-1450	Sharp	Thailand	699	1	380 x 670 x 260	✓ / -	20 / 300	20 / 79	0.

equal

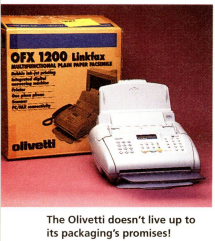
Problems

■ **SAMSUNG SF 4000**: This machine had problems with connecting to a direct line on our local analogue phone exchange, but not when using a digital exchange. Samsung fixed the problem by upgrading the software. It seems the original software was designed to be used with modern digital exchanges.

We don't think you should buy the SAMSUNG unless you're connected to a digital phone exchange.

How can you find out? Call Telstra on 13 20 00 or 13 22 00.

■ **OLIVETTI OFX 1200**: The machine we purchased didn't have a handset, although the packaging and the instruction manual refer to one. JTC International told us it submitted this model for an Austel permit without a handset and didn't reapply for a new permit to include the handset. However, it says it may be able to supply handsets in the future to customers who need one, but couldn't give us any details yet.



The Olivetti doesn't live up to its packaging's promises!

While you probably won't spend $1100 without having a closer look at the product or talking to a salesperson, **there's still a chance you could be misled by the packaging.**

In addition, the microphone on the answering machine wasn't where it was supposed to be according to the instruction manual. It took us several phone calls to Olivetti to locate it.

Due to these problems we don't think the OLIVETTI is a good choice.

■ **SAGEM Phonefax 311**: The broadcast function described in the instruction manual didn't work, and wasn't listed in the function list that can be printed out. We contacted **SAGEM**, which told us the **Phonefax 311** doesn't have a broadcast function and the instruction manual is wrong.

Features they all have

■ **One-touch dial** (except the **SAGEM**).

■ **Hands-free dialling**: All models allow you to dial without picking up the handset.

■ **Redial button**.

■ **Polling**: If your fax machine has a polling function, you can call another fax unit (if it also has this feature) and request a document stored in that machine's memory to be faxed to you. Usually, you'll have to pay for the phone call to poll a document. All the machines tested can poll, and all but the **CANON** can also be polled.

■ **Different quality modes**: 'Standard' and 'fine' modes for text, 'photo' mode for pictures.

■ **Different receiving modes**: All the machines have all these modes:

— **Fax only**: The fax machine will only receive faxes, not telephone calls.

— **Manual answer**: The fax machine will treat all calls as phone calls. You'll have to answer the call and — if it's an incoming fax — press the 'Start' button.

— **Auto answer**: The fax machine's phone/fax switch will automatically send the incoming call to the correct machine. If it's a phone call, it'll keep on ringing until answered or — if applicable — send the call to an answering machine. If it's an incoming fax, it'll send it to the fax machine. You can preset the number of rings before the machine makes its decision (**adjustable ring response time**).

■ **Time-delayed transmission:** All the fax machines tested allow you to program a document to be sent at a later time — for example, if you want to take advantage of cheaper phone rates. However, the document to be faxed has to stay in the document feeder of the **PANASONIC** and the **OLIVETTI**. All the other models allow you to load the document into memory, so the fax machine can be used to send other documents in the meantime.

■ **Memory**: All models tested except the **PANASONIC** and **OLIVETTI** can send from memory (which can be useful, for example, if you want to send a document time-delayed (see above), or if you want to broadcast it; see table note 5, right). All except the **PANASONIC** can also receive into memory (which is essential if your machine is out of paper, ink or ribbon). The **OLIVETTI** will receive into memory if it runs out of ink or paper while already receiving.

■ **Copying**.

■ **Out-of-paper alarm/message**.

■ **Out-of-ink/ribbon alarm/message**.

■ **Reports:** The fax machines tested allow you to select a number of reports to be printed out:

— The 'last transmission report' confirms that the last transmission was successful. With plain-paper faxes this will waste a whole A4 sheet — so it may be wise to switch off this function.

— Error reports will, for example, tell you whether a transmission or reception was unsuccessful. All the models except the **PANASONIC** and **SAGEM** will also inform you when there's been a power failure and a fax or faxes were lost.

— A list of the phone and fax numbers you have stored in the one-touch and speed-dial locations.

2	3	4	5		6	7	8	9	
rint type	Phone works without power	Computer connection available	Broadcasting	Helpline / customer service	Quality score (%)	Speed score (%)	Ease of use score (%)	Overall score (%)	Brand / model (in rank order)
kjet	✓		✓	1800 688 553	69	74	85	77	**SAMSUNG** SF 4000 (A)
ubble jet	(H)		✓	13 13 83	72	75	75	74	**CANON** FAX-B100
bbon		F,P,S	✓	(02) 9887 4344 (K)	68	76	70	71	**BROTHER** FAX-1020
bbon				13 26 00	66	78	70	71	**PANASONIC** KX-F1000AL
kjet	(J)	F,P,S		—	68	78	65	70	**OLIVETTI** OFX 1200 (B)
bbon		P		1800 655 991	61	78	65	68	**SAGEM** Phonefax 311 (C)
bbon			✓	(02) 9830 4860	62	75	60	65	**SHARP** FO-1450

equal

*Prices shown are a good target to aim for when shopping around, based on nationwide checks in May/June 1997.

(A) Two machines of this model were purchased for testing. Both had software that had to be altered before they could be used on an analogue phone exchange. If you decide to buy this model, you may face the same problem (see *Problems*, page 46, for details).

(B) This model doesn't have a telephone handset (see *Problems*, page 46, for details).

(C) According to the manufacturer, this model has been discontinued. However, stocks may still be available.

(D) Brother tells us it has just reduced the normal selling price to $599.

(E) This price includes a computer link.

(F) Warranty wasn't stated, but the manufacturer tells us it's one year.

(G) This model has a separate power supply, measuring 210 x 65 x 75 mm.

(H) This model can receive but not make calls.

(I) Not tested: the model doesn't have a telephone handset.

(K) Then select 'Product support' by dialling '2'.

1 Ringer equivalent number (REN)

Anything you connect to your phone line (phones, answering machines, faxes, modems) draws from the line's capacity. The amount drawn is called the ringer equivalent number (REN), and is usually printed on the nameplate of the appliance. Generally, the maximum REN capacity of a phone line is 3, so the lower the REN of each appliance you have, the better. If the sum of the RENs of all appliances you've connected to your phone line exceeds 3, you may find they don't work properly — for example, your phone may not ring.

2 Print type

See *Print type*, page 44, for details of the different print types.

3 Phone works without power

If a model doesn't allow you to make phone calls during a power failure, make sure you connect a separate phone. Otherwise you may be left without a working phone in an emergency.

4 Computer connection

For some fax machines, a computer link is available that allows you to connect it to your computer and perform the following tasks:

- F: Fax from your computer.
- P: Print from your computer.
- S: Scan documents into your computer.

5 Broadcasting

Models with a tick in this column allow you to send the same document to several different destinations without having to feed it through each time.

6 Quality score

The quality score is a combination of the following assessments:

- Text quality: A standard document was sent from the fax machines to a computer, and received by the fax machines from a computer. This was done in both 'standard' and 'fine' modes. The quality of the documents was assessed.
- Picture quality: Both a black-and-white and a colour version of the same picture were sent from the fax machines to a computer, and received by the fax machines from a reference fax machine. The quality of the pictures was assessed.

7 Speed score

The speed score is a combination of the following assessments:

- Text speed: Both a one-page and a three-page document were sent from the fax machines to a computer, and received by the fax machines from a computer. The transmission times were measured.
- Picture speed: Both a black-and-white and a colour version of the same picture were sent from the fax machines to a computer, and received by the fax machines from a reference fax machine. The transmission times were measured.

8 Ease of use score

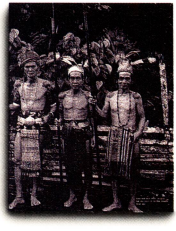
A user panel assessed the instruction manuals and the ease of carrying out common tasks such as storing phone numbers in one-touch-dial locations and changing the print cartridge.

9 Overall score

The overall score is a combination of the quality, speed and ease of use scores, weighted as follows:

- Quality score: 30%.
- Speed score: 30%.
- Ease of use score: 40%.

You may notice there's no Telstra model in this test: the company has informed us that it doesn't sell fax machines for the time being.



Best and worst results when sending a colour picture: the Canon (right) produced much better contrast and more detail.

Automatic dialling machines

Twice in as many weeks I have received nuisance phone calls. When I pick up the receiver I hear nothing but silence. Speaking achieves nothing. Nobody says anything back. Then, after a delay, a recording says something to the effect that it thinks it has the answer to my mortgage problems if only I would press '9'.

Now it seems we have to endure self-dialling machines. Is this something local or part of a nationwide trend? The organisation responsible for this nuisance call doesn't introduce itself. Is it any wonder I have no desire to press '9'?

What I want to know is whether the persons responsible for this are breaking any rules besides those of common courtesy? And can this practice be stopped before the telephone network begins to fill with acoustic junk mail?

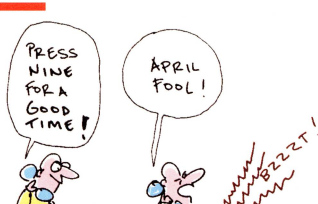
Brian Paterson
Oxley, Queensland

Under the new telecommunications act, the Australian Communications Industry Forum (ACIF) is playing a lead role in drafting a code of practice for the industry. Among a number of privacy issues it's planning to address, ACIF is expected to look at the use of intrusive communications devices — which includes auto diallers.

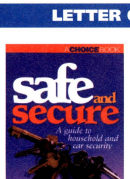
The last time the government explored this issue, back in October 1995, the Austel Privacy Advisory Committee recommended that "without an individual's consent, an organisation should not contact the individual using automatic calling equipment to convey an artificial or prerecorded voice". The committee also said that an organisation should clearly identify itself and its purpose when making telemarketing calls.

While it's too early to speculate on the form and content of ACIF's code, it's likely that Austel's 1995 work will act as a starting point for deliberations on privacy issues — including auto diallers.

The Consumers' Association participates in ACIF and will be arguing for stronger regulation of auto diallers. In the meantime, we'd like to hear from you if you've had a problem similar to Brian's. Please write to us at ***Telephone junk mail****, 57 Carrington Road, Marrickville 2204.*



LETTER OF THE MONTH



We want to hear from you — your experiences help our research and often let other readers know about scams and rip-offs. To say thank you for writing to us, each *Your Letters* awards a prize of a CHOICE book to the 'Letter of the month'. This month's winner, Brian Paterson, of Oxley, Queensland, receives *Safe and Secure*, which explains how to make your home, your car and yourself safer, with practical tips on improving your security cheaply and effectively.

We're sorry we don't have the resources to answer all your letters personally, and in the magazine we may edit them or print only an extract. See page 2 for how to reach us.

Migraine advice

The Migraine Society of Australia receives numerous enquiries about drugs for migraine, which of course include both over-the-counter and prescription-only painkillers. The information in CHOICE's article on painkillers (February 1997), detailing the relative costs and actions of OTC painkillers, was very welcome.

However, I am a little surprised that none of the pharmacists consulted mentioned that it is important for most migraine sufferers to take an appropriate anti-nauseant at the onset of an attack, then wait 15 to 20 minutes before taking painkillers.

Most migraine attacks involve a major slowing of the gastrointestinal system. As a result, medications taken orally are poorly absorbed. One way of overcoming this problem is to take an anti-nausea medication before taking painkillers. Of these, there are two types (gastrointestinal stimulants and non-stimulants), and all are prescription-only. In any case it's wise to consult one's GP before taking any drugs for migraine.

For migraine the stimulants are particularly effective, and without them swallowing painkillers is often virtually useless. This probably explains why many migraine sufferers who have not been prescribed gastrointestinal stimulants take second and third doses of painkillers, sometimes in progressively larger quantities. This often makes the side effects worse without even the benefit of achieving adequate pain reduction.

Peter Adamson
President
Migraine Society of Australia

The focus of our article was on the active ingredients of over-the-counter painkillers, rather than on their use for specific conditions, but we appreciate this additional information for migraine sufferers.

The Migraine Society of Australia can be contacted at PO Box 2504, Kent Town 5071; phone (08) 8344 3709.

Repair service

Our Smeg dishwasher, bought just over two years ago, washed well. In June, however, the electrical connection failed and tripped our circuits, but our machine was past its two-year guarantee.

The Smeg distributor [Omega Appliances] sent a technician who didn't replace the original terminal block but connected it differently. He charged more than Omega Appliances had indicated, saying that he was a totally independent contractor.

On first using the dishwasher some days later, it would not stop, but kept on washing. We thought

RECALLS & BANS

we might have done something wrong and tried again. Same problem. I rang Omega Appliances, which contacted the technician. Omega told me he said "not my problem", and gave no indication that he was willing to investigate. We contacted another service provider, recommended to us, who found that the wire to the heater had been pulled out. Reconnecting the wire fixed the problem.

Is this a lesson to be learnt? If a company doesn't have its own service department, should one think twice about purchasing an appliance from it?

Dr John Hirshman
Vaucluse, NSW

Dr Hirshman was right to complain to Omega Appliances that it was responsible for the services provided by its contractors — independent or not — and that the quality of work done by the first technician was inadequate. After an initial delay, Omega Appliances eventually agreed, saying that its first response was "not appropriate". The company recently reimbursed him for the cost of the repair service charged by the first contractor.

To answer Dr Hirshman's question: no, it shouldn't make a difference to your choice of appliance. It's quite common for distributors and manufacturers to rely on outside contractors to perform repairs on their products, particularly if the appliances are imported. Even if a company does have its own in-house repair capability, its service may not cover your area — say, if you live in the country; and even a company that does its own repairs may use contractors when it has an overload of work.

Whether it uses outside contractors, in-house technicians or a combination of both, a company should always stand behind the quality of its service. ❑

If you find a recall or ban not on our list, please let us know. Companies often rent 1800 numbers for a couple of months after the recall is announced. If the number given is no longer operating, phone the manufacturer or retailer direct.

THE PRODUCT: Jensen Shoes has recalled some **Shews** brand infant and toddler shoes sold before the end of August:

- **Beach** plastic sandals with woven upper T-Bar, open back with adjustable strap, product number 7066079, in colours clear, red and blue.
- **Toytown** plastic sandals with adjustable upper and stud fastening, open toe and back, product number 7066087, in colours yellow/navy/orange, red/yellow/royal, purple/blue/green.
- **Surfie** Y-back EVA plastic sandals with a three-strip upper, stud fastener and striped lining, product number 7066103, in colours blue and green.
- **Gidget** EVA plastic, open-back sandals with a one-strap upper, flower motif on upper and stud fastener, product number 7066095, in colours blue and pink.

The problem: An adjustable press-stud buckle, which is not fixed on the shoe, may detach and become an ingestion or inhalation hazard.

What to do: If you have purchased these shoes since October 1996, return them to your nearest Jensens Shoe store for a full refund. For more information phone 1800 818 337.

THE PRODUCT: GE5 Products has recalled **Lion model LC240-6 inspection handlamp** with approval marking V900357, purchased between July 1996 and July 1997.

The problem: Some of these products in a recent shipment have moulded handles which contain an impurity in the rubber compound. Under certain circumstances, this may result in an electrical hazard to the user.

What to do: Immediately disconnect the handlamp from the power supply and return it to the place of purchase for return to the manufacturer, where it will be fixed free of charge. For more information phone (03) 9543 5711.

THE PRODUCT: Belic Tools and Machinery has recalled **Hydraulic garage jack,** model unit 82251, sold after February 1, 1997.

The problem: Labelling on the jack doesn't comply with the standard.

What to do: Don't use it. Return it to Belic Tools and Machinery, 134 Canterbury Road, Blackburn South 3130, for relabelling. For more information phone (03) 9877 9111.

THE PRODUCT: North South Importers and Wholesalers has recalled **Changsu Tongun Machinery** silver-colour silver-label **bottle jacks**, model numbers T90203, T90403, T90603, T90803, T91203, T 92003 (capacity of 2 ton to 20 ton), sold between December 1, 1996, and June 24, 1997.

The problem: The label on the jack doesn't comply with the Australian standard. The jack is not marked with: adequate operating instructions, the name of the manufacturer, nominal safe working load in kilograms, the correct hydraulic fluid and recommended fluid level for the jack. The jack's operating instructions do not warn that "no person should remain in a vehicle that is being jacked".

What to do: Don't use it. Immediately return it to the place of purchase to have a new label attached. Send the instruction manual to North South Importers and Wholesalers, 5 Apex Court, Thomastown 3074, for amendment. For further information phone (03) 9464 3038 or fax (03) 9465 0840.

THE PRODUCT: Lion has issued a warning to consumers regarding the **Lion 1500 kg trolley jack**, model number LT067.

The problem: The jack does not meet the Australian standard — it's not marked with operating instructions, and the operating manual fails to warn that you shouldn't get under a vehicle that is supported only by a jack, and that the vehicle's wheels should be chocked and in the straight-ahead position.

What to do: Don't use it. Contact Lion at 2-4 Research Drive, Croydon 3136, phone (03) 9761 6199, or fax (03) 9761 6177, for a label marked with the required instructions. Forward your owner's manual to Lion for amendment.

THE PRODUCT: AMS Importers and Wholesalers has recalled **AMS 1.5 Ton Hydraulic floor jack**, model number JYO2GA, distributed from December 1996.

The problem: This product does not comply with Australian standards — insufficient safety and operating instructions are attached.

What to do: Don't use the jack; return it to the place of purchase to have a new label attached. The company will arrange for a pick-up of the product and a full refund. For more information phone 1800 077 432.

THE PRODUCT: Mainland Dairies has recalled **Ones processed cheddar cheese individually wrapped slices** (regular red pack), 250 g and 500 g, with best-before dates of March 28 and April 28, 1998.

The problem: A small strip of plastic film may remain on some individual slices once unwrapped.

What to do: Return it to the place of purchase for a full refund. For more information phone 1800 633 275.

THE PRODUCT: Gold Cob have recalled **kabanas** sold unpackaged between July 7 and 14, 1997, through takeaways, cafes, and quick-service stores.

The problem: There have been reports of foreign fragments in the product.

What to do: Don't eat it. Return it to the place of purchase for a refund. For more information call 1800 681 108.

THE PRODUCT: Nu-Life, on the advice of the Australian Competition and Consumer Commission (ACCC), is refunding the full purchase price of the following publications:

- ***Foods that make you lose weight.***
- ***Honey, vinegar and garlic — nature's miracle trio.***

The problem: Advertisements for the above publications made representations regarding the potential benefits of honey, vinegar and garlic. In particular, the advertisements claimed that by using these products as specified in the book, people can dramatically increase the rate at which they burn calories and achieve substantial weight loss benefits (doubling their rate of weight loss overnight). There is no scientifically accepted evidence that either garlic or vinegar, alone or in combination, is able to assist in weight loss in the manner claimed. The books themselves are a collection of historical anecdotes, folk remedies and recipes and do not purport to guarantee any therapeutic effects of garlic, honey or vinegar.

What to do: Consumers who believe they have been misled or are not happy with their purchase should contact Nu-Life at 2/74 Old Barrenjoey Road, Avalon 2107, at any time within the 90 days from July 31 for a full refund of the purchase price, including the initial postage and handling charge, together with the cost of returning the book(s) to Nu-Life. Consumers who have misplaced the book(s) are still eligible for a refund upon providing a statutory declaration that they were misled by the advertising but no longer have the book(s). ❑

INSIDE *story*

CHOICE's research area.

EVERYTHING CHOICE PUBLISHES IS researched carefully and in depth to make sure we bring you the latest information in a factual and balanced way — neither sensationalised nor over-simplified. This, plus our independent comparative tests of products and services, is what sets us apart from most of the rest of the media.

You need to know you can trust what we say to be accurate, well considered and unbiased. This means you also need to know if — as unfortunately happens occasionally — we make a mistake.

That's why we print corrections when we discover a mistake — to make sure you get the correct information as soon as possible. And we don't hide them: if there are any corrections, you'll always find them in our *Choice Cuts* section, on pages 4 and 5.

Some subscribers notice these corrections and ask us why they see corrections in CHOICE but almost never in other media.

It's not because other publications don't make mistakes. However, most don't admit to them unless obliged to for a legal reason — so most of the time you wouldn't know you'd been misinformed or misled.

CHOICE will continue to publish corrections — both to maintain our credibility as a fair and balanced commentator and to make sure you get the most accurate information at all times.

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The Australian Consumers' Association is a non-profit, non-party-political organisation, established in 1959 to provide consumers with information and advice on goods, services, health and personal finances, and to help maintain and enhance the quality of life for consumers. It is a Council member of Consumers International.

We are completely independent. We buy all the products we test on the open market. We are not beholden to any commercial, government or union interests, and we don't accept advertising, paid or unpaid. Our income is derived from the sale of CHOICE and our other publications and products.

We test and rate products and services. Our ratings are usually based on quality without regard to price, and are derived from lab tests, expert judgments and reader surveys. If a product is high in quality and relatively low in price, we deem it a **Best Buy**. A rating applies only to the brand and model tested, not to other models sold under the same brand name, unless so noted. We can't conduct special tests or provide information about tested products beyond what appears in CHOICE. Financial information in CHOICE is of a general nature, and is not intended to be advice on individual investments which should or should not be made.

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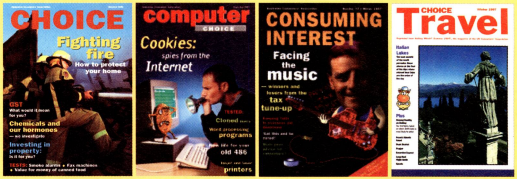

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Twelve-month INDEX

November 1996 — October 1997

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* indicates an update of a previous report, additions or corrections to reports, small follow-up items or letters.
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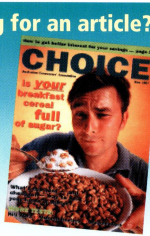

Pay TV — great expectations

There are mixed signals between what this dynamic technology promises to deliver in the future and what you can actually get right now. And as one reader found out, if you're interested in getting connected, you should know exactly what your choices are — preferably before a door-to-door salesperson comes calling.

CAUGHT OFF-GUARD

As an artery of cable threaded its way through their neighbourhood, Catherine Diver and her husband Paul had a salesman from Foxtel show up on their doorstep, asking if they wanted to subscribe. "During our discussion with him," Catherine said, "we made it clear we weren't interested in cable TV, but we were interested in the Internet." A high-speed cable connection was what they were after — it's claimed to be much quicker than using a phone line.

After listening to the salesman's pitch, Catherine was left with the impression that in order to get a cable pathway to the Internet she needed to have a Foxtel connection to her house. She eventually paid about $60 to subscribe.

After the installation, Catherine called Foxtel because the service had been installed to her TV. She wanted to know when the cable would be redirected to her computer.

If a cable Internet connection was what she wanted, Foxtel said, she should have been told to go straight to its part-owner, Telstra. Its Big Pond service could have given her the high-speed cable link — without pay TV — for about $30 (plus the cost of a cable modem). Even though the Internet and pay TV are accessed through the same Telstra cable, Foxtel doesn't provide Internet services and will not hook up a computer. The only service it sells is pay TV.

Catherine felt she'd been misled by the Foxtel salesman and regrets not being more vigilant. "When someone knocks on your door," she said, "you're not prepared and you don't know the right questions to ask."

If you feel you've been misled or misinformed about pay TV — either by the company itself or by one of its roving door-knockers — try to resolve the matter first by contacting the company. If you're not satisfied with its response, you can take the matter up with your state's fair trading department.

BETWEEN THE THREE PRIMARY PROVIDERS of pay TV — Galaxy, Optus Vision and Foxtel — the nationwide battle to win subscribers has escalated into an intense and competitive campaign. It's not surprising to find that their marketing techniques complement the spirited flavour of the contest.

Each of the two cable providers — Optus Vision and Foxtel — employs or contracts its own door-knocking sales force in a street-by-street effort that follows the cable as it burrows through neighbourhoods or is strung from telegraph poles. Galaxy, which delivers pay TV by microwave or satellite transmission, also sells door-to-door. It's a powerful tactic that's proved to be as effective as it is direct.

When an enthusiastic salesperson from a pay TV provider appears at your door, you need to clearly understand the service being offered. Before making a decision you should know what the competition provides as well. This is a continually changing field that has the potential to encompass more than just TV — Internet and local telephone services are often mentioned — and it's easy to be confused, misinformed or misled about what's available — as Catherine found out (see *Caught off-guard, above*). ❑

What you should know

If you're interested in pay TV, phone around to the providers to find out what's available — preferably before a salesperson comes calling. You should ask about:

- **Services:** Make certain you have the latest picture of what's for sale. Foxtel and Galaxy only provide pay TV. Optus Vision delivers pay TV and, in some areas, local telephone services. Two other companies, Austar Entertainment and East Coast Television, have franchises to provide Galaxy's TV programs in regional areas. At present none of these pay TV services is selling access to the Internet.
- **Availability:** When will the provider's service be available in your neighbourhood? Even if you're already able to access one pay TV service, you may find it'd be better to wait for another provider to reach your area. Don't feel pressured to sign up with the very first pay TV salesperson that knocks at your door — any discounts they offer to subscribe on the spot won't be substantial enough to make up for the cost of limiting your choice.
- **Programming:** Which provider offers the package of programs — for example, the mix of movies, sports and news — that best suits your interests?
- **Rates:** How do the providers compare in terms of installation fees and monthly subscription rates? Fees can vary according to where you live.
- **Future services:** You may also want to ask each provider about any additional services it's planning to deliver in the future — say, local telephone or interactive services. Ask when they'll be available, but don't sign up purely on the basis of future services — they may take a lot longer to arrive than promised.